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INSIDE DOPE

by GEORGE F. TAUBENECK

Story of the Week
Where Do We Go From Here?
Just Like Hitler
They Studied History
Back to Fundamentals**Story of the Week**

At a certain DuPont explosives plant it is reported that workmen see this sign every day as they check in:

"If you insist on your right to smoke while you work, go right ahead. You can then leave through the exit that will suddenly appear in the roof."

**Where Do We Go
From Here?**

Louis Ruthenburg, president of Servel, and one of the world's foremost economic statesmen, warns all of us that the cherished institutions of our country are threatened by the rapidly rising tide of alien philosophies.

Use whatever terms we choose—Stateism against Freedom, Dictatorship against Democracy, Communism against Americanism, Paganism against Christianity—we must agree with the Reverend J. Hugh O'Donnell, president of Notre Dame university, who has said, "The battle line is drawn. The opposing philosophies are arrayed against each other now just as they were when Hitler's Nazi forces first struck at western civilization. The one difference is that the enemy has changed its name."

We Americans have been well indoctrinated against the abominations of Hitlerism. Do we not realize that virtually all of Hitler's vile methods were lifted bodily from the philosophies and practices of Russian communism? Russia was the laboratory and the proving ground that gave Hitler his designs.

For 16 years before Hitler came to power the Russian dictatorship had developed its secret police, its concentration camps, its slave labor, its mass murder techniques, its "big lies," its liquidation of religion, its all-powerful bureaucracy and other abominations. Complete suppression of individual freedom under the all-powerful State had been accomplished in Russia when the Austrian paper hanger was still a joke in Germany.

We must not allow ourselves to be misled by the double talk of Stalin's fifth columnists. From the American viewpoint, Hitlerism and Russian communism are identical. When a communist calls one of us a fascist, he simply accuses us of copying Russian communism. Against such silly and confusing double talk we must immunize ourselves.

Just Like Hitler

Hitler published a book called "Mein Kampf," in which he told the world exactly what he planned to do. The Russian communists have been equally candid in posting their objectives so that he who runs may read. As Max Eastman points out in *The American Mercury*:

"Only a person who is unable to read has any excuse for ignorance—or for the slightest doubt—of what Stalin is up to. It is explicitly written down in a book signed by him, currently revised by him, and translated by his authorization into all civilized languages, selling in millions of copies, and adhered to as a textbook and campaign book by his followers in every corner of the globe. It can be read through and digested in one afternoon, and summarized in about 10 propositions.

"Here, in one sentence from Stalin's book, 'Problems of Leninism,'

(Concluded on Page 8, Column 3)

**Bankers Urge
20% Down, 36
Month Terms**

NEW YORK CITY—Down payments of 20% with 36 months to pay have been recommended for refrigerators, ranges, and washers by the consumer credit committee of the American Bankers Association.

These suggestions went out to banks engaged in consumer installment lending to serve as a guide for use when government controls over credit end next Nov. 1.

Terms suggested for automobiles and television sets are tighter than those for appliances. Minimum down payment of 33½% to 40% with 15 to 24 months on cars, and 25% down and 18 months on television sets were recommended.

"Excessive debt should not be made attractive and merchandised in easy payments," declared Carl M. Flora, chairman of the bankers' committee. "The days of a dollar down and a dollar a week should not return.

"Consumer credit has created mass markets and made possible mass distribution of durable goods," he added. "This credit will play a leading role in maintaining our economy on a high level.

"By its very success in the field of consumer credit, banking has definitely assumed the responsibility to business to provide adequate credit, both to dealers and to purchasers in order to permit the maximum flow of goods that can be soundly and profitably absorbed."

**Commercial Credit Will
Oppose 'Selling Terms'**

BALTIMORE, Md.—Declaring that Commercial Credit Corp. is "opposed to the practice of selling terms instead of merchandise," Howard L. Wynegar, president of the company, has stated, that when the abolition of Regulation W comes, his national sales finance organization will return to financing terms "fair alike to the purchaser of automobiles and home appliances and the dealer."

Commercial Credit will broaden its financing terms but will make every effort to maintain such terms as will serve to protect the buyer against down payments and maturities which

(Concluded on Page 4, Column 4)

**Wilson Bids for Market
In New York, Chicago**

SMYRNA, Del.—Entry of Wilson Refrigeration, Inc., a Division of Wilson Cabinet Co., Inc., into the New York and Chicago market was announced this week by John E. Wilson, Jr., president of Wilson Refrigeration, Inc., of Smyrna, with the appointment of Paul A. Hunker of New York as manager, Special Accounts Division, for the company in the metropolitan area of both cities.

Mr. Hunker will spearhead plans to extend distribution of Wilson home and farm freezers and other com-

(Concluded on Page 4, Column 5)

**Rogers Merges with
Indian Motorcycle**

SPRINGFIELD, Mass.—The final step in the reorganization program of the Indian Motorcycle Co. was approved at a special meeting of stockholders here recently, Ralph B. Rogers, president, announced. The stockholders voted favorably upon a plan to merge the R. B. Rogers Companies, Inc., into Indian.

The move already has been ap-

(Concluded on Back Page, Column 1)

**State's Ruling on
'Plumbing' May
Hit Appliances**

LANSING, Mich.—In an opinion which may have considerable significance to the refrigeration and major appliance industry, particularly with regard to labor relations, the Michigan Attorney General's office has concluded that the connection of domestic hot water storage tanks, water softeners, refrigerators, water heaters, and similar domestic appliances with water or drainage systems is included in the legal definition of plumbing.

The State Plumbing Board had asked the Attorney General whether such connections are included or excluded from the definition of plumbing.

(Concluded on Page 29, Column 1)

**Sales Jump 47% for
Appliance Dealers**

WASHINGTON, D. C.—While other types of home furnishings retailers were reporting small sales gains in June, 1947, as compared with June, 1946, and were chalking up sales declines from May, 1947, household appliance dealers during June came through with a whopping 47% increase in sales over last year and a 4% rise over the previous month, the U. S. Bureau of Census has reported.

Sales by radio and household appliance dealers were 41% over last year and 1% over May, the Bureau said.

Independent home furnishings stores showed a sales increase of 11% over last year and a decline of 6% from May.

Independent retailers scored a 13% rise over June, 1946, and a 7% drop under the preceding month.

Department store sales nosed only 1% ahead of June last year and fell 13% behind May, according to the Bureau's figures.

**Tin Limits Lifted from
Refrigeration Solder**

WASHINGTON, D.C.—Removal of restrictions, effective Aug. 5, on the tin content of solder for a list of specified refrigeration and motor uses, has been announced by the Office of Materials Distribution.

Solder of unlimited tin content may now be used on railroad car and truck refrigeration; refrigeration equipment inside refrigerated compartments; aircraft motors; electric traction motors for railroads, street cars, and buses.

Solder for these purposes was previously limited to 50% tin.

**Are New York and Washington
In America?**

(An Editorial)

RECENT trips to New York City and Washington—plus perusal of the "confidential letter" tip-sheets emanating from those two cities—have made us wonder if the Master Minds in those two influential metropolises aren't living in a different world from the rest of us.

In New York City and Washington one continually hears talk of the "recession." It's either here or "just around the corner." Anywhere else we travel in America there's buoyant optimism over business prospects.

While the owlish "economists" in Washington and the bearish "advisers" in Wall Street view the future through dark glasses, and warn their clients to run for the storm cellar, the clients themselves can see nothing ahead but a roseate future for themselves and their own businesses.

Talk to almost any business man in Chicago, Detroit, Cleveland, Atlanta, St. Louis, Dallas, Los Angeles, Omaha, or Minneapolis and you'll hear two conflicting viewpoints:

(Concluded on Page 16)

**Industry May Try To Hold Prices
Despite Steel; Bendix Up \$10****Bendix Says Its Costs
Actually Warrant
\$20 Price Boost**

SOUTH BEND, Ind.—A price increase of \$10, or approximately 4%, on the Bendix automatic washer, became effective Aug. 1, W. F. Linville, general sales manager of Bendix Home Appliances, Inc., announced last week.

The standard model now retails for \$239.50, and the deluxe at \$259.50, he said.

"Fortunately, our volume and production facilities have enabled us to hold our increases to a minimum," Mr. Linville told distributors.

"Manufacturing costs have been steadily increasing," he said. "These increases dictate an advance of \$20 on list price.

"As much as we believe a \$20 price adjustment just and reasonable, we have held our increase to \$10, which is, roughly, 4%."

**Frozen Food Council
Plans Consumer Drive**

WASHINGTON, D. C.—In an effort to develop a permanent, high-level consumer acceptance of and preference for frozen foods, members of that industry have formed the National Frozen Food Council, Inc.

Formation of the group, which climaxed discussions started last year, took place during a recent meeting here.

The Council announced it would conduct a continuous educational and promotion program directed at all consumers and also emphasize improvement of frozen food quality and

(Concluded on Page 4, Column 4)

**V. C. Knight Appointed
Vice President of Betz**

HAMMOND, Ind.—Appointment of V. C. Knight as vice president and general manager has recently been announced by Lyman B. Betz, president of the Betz Corp.

Mr. Knight has purchased stock in the Betz Corp., manufacturers of "Filterpure" forced convection coils, and will oversee important functions of office and plant management.

Prior to his association with Betz, Mr. Knight was vice president in charge of production for McCray Refrigerator Co.

**G-E President Promises
'To Do Our Darndest'
To Avoid Increase**

DETROIT—Will manufacturers of refrigerators and appliances be forced to raise their prices because of the recent steel increases?

The industry has offered no definite answer to that question as yet, but General Electric Co. has declared that it will "do its darndest to maintain present prices" and Apex Electrical Mfg. Co. predicts that price increases in its line may be weeks away.

"It will be several weeks before we come to a decision on what action if any will be necessary," states an official of Westinghouse Electric Corp.

"Our accounting department is making a thorough study of the effect of steel price increases on the prices of the company."

Up to Aug. 11 there had been no action on the part of Frigidaire Division of General Motors Corp. to increase prices on Frigidaire appliances and refrigeration and air conditioning products.

EXPECT FRIGIDAIRE RAISE

Some observers believed that Frigidaire products were in line for increases in view of the announced increases of from 2 to 6% on all General Motors passenger cars and Chevrolet trucks. One press story on this increase said that "price increases on non-automotive products will follow the same general pattern as for passenger cars and trucks."

Meanwhile one independent source indicates that appliance manufacturers may try to absorb these increasing costs out of profits because they fear consumer sales resistance and competition.

The new steel prices figure out to about \$1.75 more on a refrigerator and \$1.50 additional cost for a range, according to one observer's estimate.

Manufacturers, however, who are able to obtain annealing steel in quantity at market levels may absorb increased costs. The higher costs on these sheets work out to about 80 cents extra on the 200 lbs. that go into a refrigerator, according to another source.

Suppliers forced into the "gray market" because of the steel shortage report that the recent steel increases have resulted in a 50% to 80% for them, which they are passing on.

INCREASES PASSED ALONG

Most steel fabricators are passing along the price increases from the mills. For example, Mullins Mfg. Co. of Salem, Ohio, producer of washing machine tubs, a line of kitchen sinks and cabinets, and automotive stampings, will increase its prices in line with the steel advances, stated George E. Whitlock, president.

Explaining G-E's outlook on the situation, President Charles E. Wilson declared, "We don't know yet what the recent increase in steel prices will do to our costs, but we're going to do our darndest to maintain present prices.

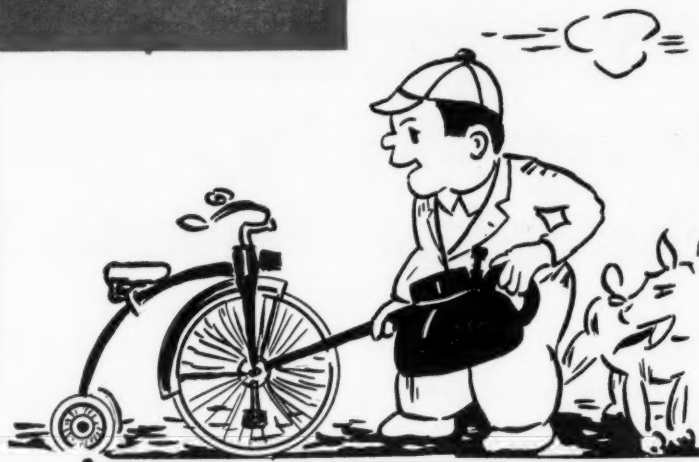
"At the moment, we've adopted a stop-look-and-listen attitude with respect to prices. We feel that the public's point of view must be considered in this price problem. Moreover, if we're going to keep the economy perking, prices have got to be held."

G-E is still aiming to lower prices eventually through improved efficiency and economy, he added.

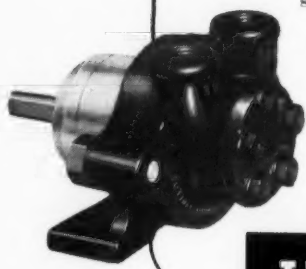
It was C. G. Frantz, Apex president, who predicted that his company hoped to avoid, or at least postpone, price increases.

"We are hopeful that we can get our suppliers to absorb some of the increases and we hope to absorb some ourselves," he said.

LUBRICATION MADE EASY



No question about it. Tuthill Model L pumps are tops for pressure lubrication service. Mechanically sealed, these positive displacement, internal-gear rotary pumps give quiet, leak-free, long-life service at low power cost. Capacities up to 3 g.p.m. in wide pressure ranges. Ring or foot mounted with many porting arrangements. Write for Tuthill Model L bulletin.



TUTHILL PUMP COMPANY
939 East 95th Street • Chicago 19, Illinois

Carrier Starts Shipments on Window-Type Conditioner And New 'Weathermaker'

SYRACUSE, N. Y.—Carrier Corp. has begun shipments of two new products—a new three-ton packaged "Weathermaker" and a new self-contained, $\frac{3}{4}$ -ton capacity, window-type room air conditioner, the company announced.

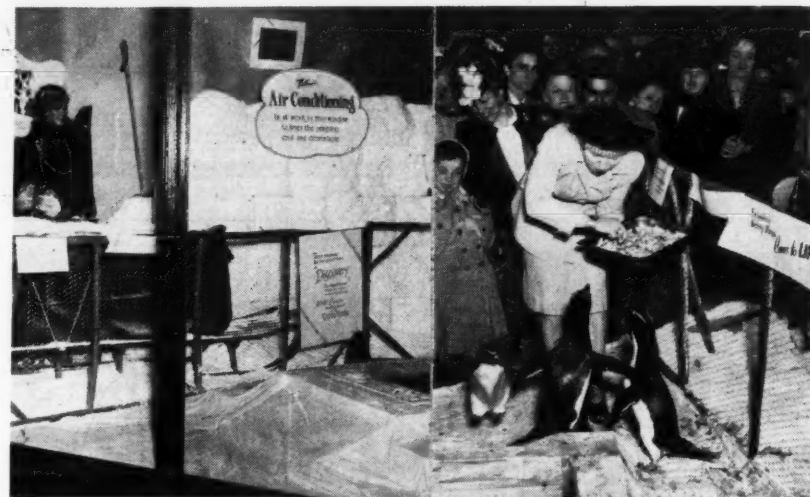
The new Weathermaker has been designated as the 50T4 and was designed for use in small stores, office suites, and homes. It is a slightly smaller brother to Carrier's 50T6, and offers a quiet compressor motor assembly on a spring-mounted base, with a two cylinder "Freon-12" compressor which is direct driven by a 3-hp. heavy-duty refrigeration type motor.

The unit contains an adjustable thermostat for the automatic control of room temperatures as well as a three-position manual switch, so that the air circulating fan can be operated independently.

The new room air conditioner is known as Carrier's 51G2, in which the compressor and fan are resiliently mounted to eliminate vibration noises. Although slightly larger than the other Carrier window-type unit, it can be easily installed. It is 26 in. wide but is equipped with side wing adapters and seal strips which allow installation in windows up to 40 or even 60 in. in width.

The new room conditioner has a sealed compressor assembly using a $\frac{3}{4}$ -hp. motor and its refrigeration system has been fully dehydrated and charged with a closely controlled quantity of "Freon-12."

Penguins Enjoy Cool Comfort In Dept. Store Window



At the right is a view of Admiral Byrd's penguins being fed in Filene's air conditioned store window. At left is another window display designed to tell the public how cool it was inside.

Filene's of Boston 'Sells' Air Conditioning to Public

BOSTON—Filene's, one of New England's largest department stores located here, has been selling its air conditioning as well as its summer merchandise to the public.

Employing everything from penguins to simulated morning glories, the store has played up virtually every advantage offered by its complete air conditioning installation.

As a timely tie-in with Boston's world premiere of "Discovery," the movie based on Rear Admiral Richard E. Byrd's Antarctic expeditions, Filene's had on display in its largest window, which is air conditioned, several of Adm. Byrd's penguins. These birds attracted large crowds, particularly at their mid-afternoon feeding time.

Appropriate photographic background, ice cakes, sleds, and a fully dressed model of an Antarctic explorer were designed to impress the passerby with the coolness inside the air conditioned store.

Theme for the summer campaign was "Cool as the morning dew." Artificial morning glories in sizes ranging from normal to exhibits 3 ft. in diameter, placed throughout the store, lent atmosphere to the theme of coolness.

Specific customer benefits from air conditioning were pointed out in a newspaper advertisement: "Air conditioning fills the fitting rooms with cucumber coolness; air conditioning keeps the kids in a good mood; air conditioning makes food a pleasure—watch Junior gobble all of his children's menu; treat your western cousins to a real fish dinner in our cool, cool restaurant; air conditioning gives you cool courage to try on fall fashions—there, that longer skirt really 'does things' for you."

The famed Rockport resort was pictured in one of the store's advertisements with the copy: "Cool as a breeze over Rockport—Filene's."

Banners, placards, and sign cards bearing the theme "cool as the morning dew" were employed, along with the morning glories, to instill the idea of coolness in the minds of the summer shoppers inside the store.

Dealer Takes It (an Air Conditioner) with Him

SAN ANTONIO, Tex.—If air conditioner prospects don't drop around too often, try doing what Howard Oas of the Gibtrac Co., here, does. He not only calls on prospective customers, but he takes his unit right along to demonstrate.

This sales technique, however, demands a certain amount of ingenuity—the kind that figures out how to mount a 690-lb. evaporative cooler on the back of a half-ton open Dodge truck; then rigs up a canvas air duct so that the unit can do an on-the-spot cooling job for the customer.

Apparently Mr. Oas has that kind of ingenuity, for he designed such a mobile set-up for his air conditioning sales contacts covering a territory from Waco to the Rio Grande.

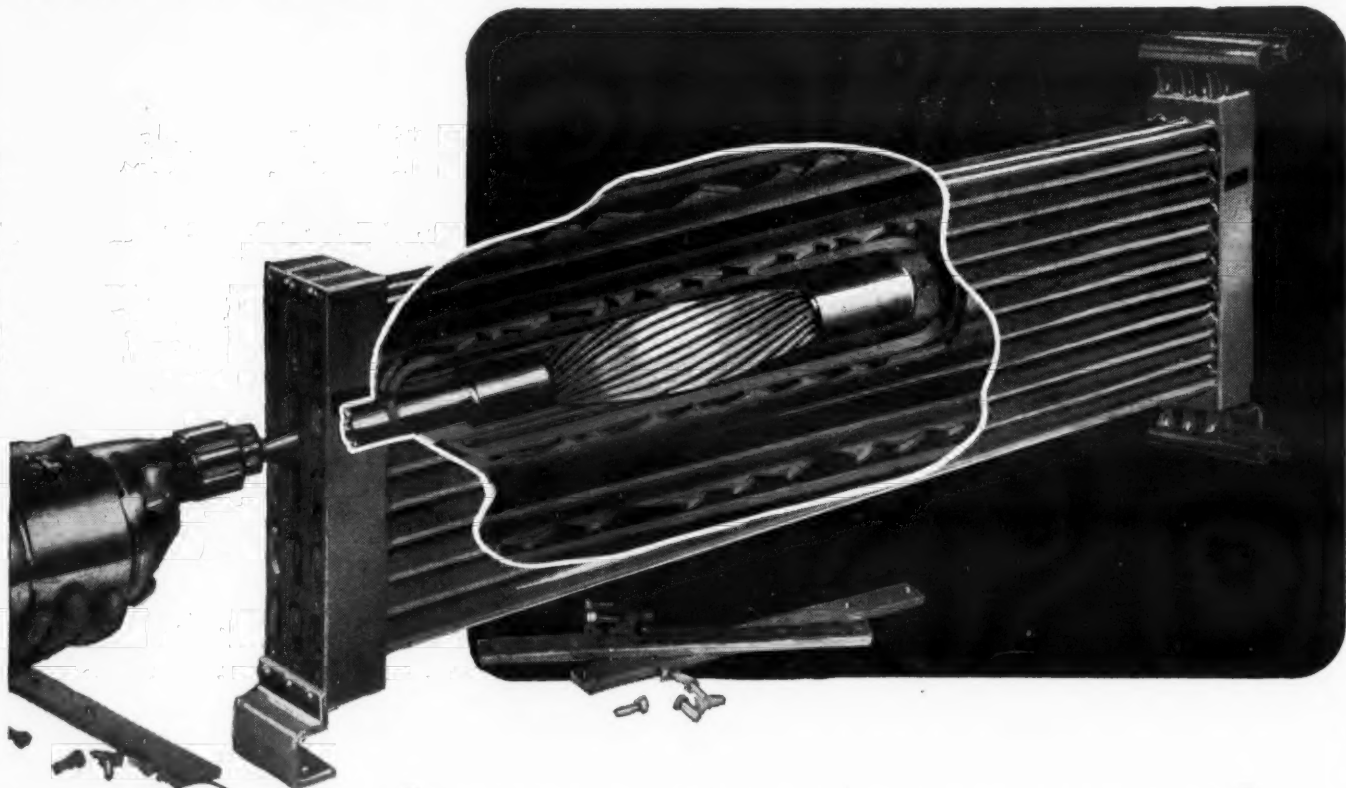
Here's the way it's constructed: In the back of the truck Mr. Oas has erected a stout platform of two by

fours bolted to the truck frame. To this platform the evaporative cooler is secured and under it a water storage tank and two fans. Next to the cooler is a small water pump, most vital piece of equipment in the 20-ft. canvas air duct, one end of which is fastened to the evaporative cooler, the other outfitted with an adjustable iron frame. Both pump and cooler are powered by electric motors which are "plugged in" to the nearest adequate outlet.

In such a case with, for example, a householder, Mr. Oas backs his truck up close to a window, fits the free end of the canvas duct into the frame of the open window, and "plugs in" the motors.

At this point in the process a competent sales talk always helps, but the real "clincher" is the unit's pumping cooled air into the home.

DOUBLE-TUBE COUNTER-FLOW CLEANABLE WATER-COOLED CONDENSERS



HM condensers more economical
because they're
cleanable!

Commercial users and service engineers the country over are now specifying Halstead & Mitchell condensers for replacement and conversion orders—to obtain the most economical operation with maximum efficiency.

These new HM units combine two qualities never before obtainable in tube-within-a-tube, water-cooled condensers—they're cleanable, and they achieve TRUE counterflow heat-exchange relationship between the coolant and the refrigerant, enabling water requirements to be reduced without sacrificing condenser unit capacity.

low in cost because of
their new two-stage design

Halstead & Mitchell's New Two-Stage Condenser design makes possible greater concentration of copper water-tube surfaces in the lower portion of the condenser. The smaller top water tubes allow ample refrigerant space, thereby eliminating resistance or pressure drop and affording the lowest possible head pressures.

The new Two-Stage design improves refrigerant velocity and increases heat-transfer efficiency. Thus, with this construction, greater heat-transfer values are effected.

HM Condensers available from 1/2 to 10 H. P.
from wholesalers in principal cities.



OFFICES: Bessemer Building, Pittsburgh 22, Pa.

WANTED

A Merchandising Distributor
for the New York Area

A leading manufacturer of a complete line of automatic oil-fired equipment has available a franchise for a distributor in the greater New York area.

The manufacturer offers:

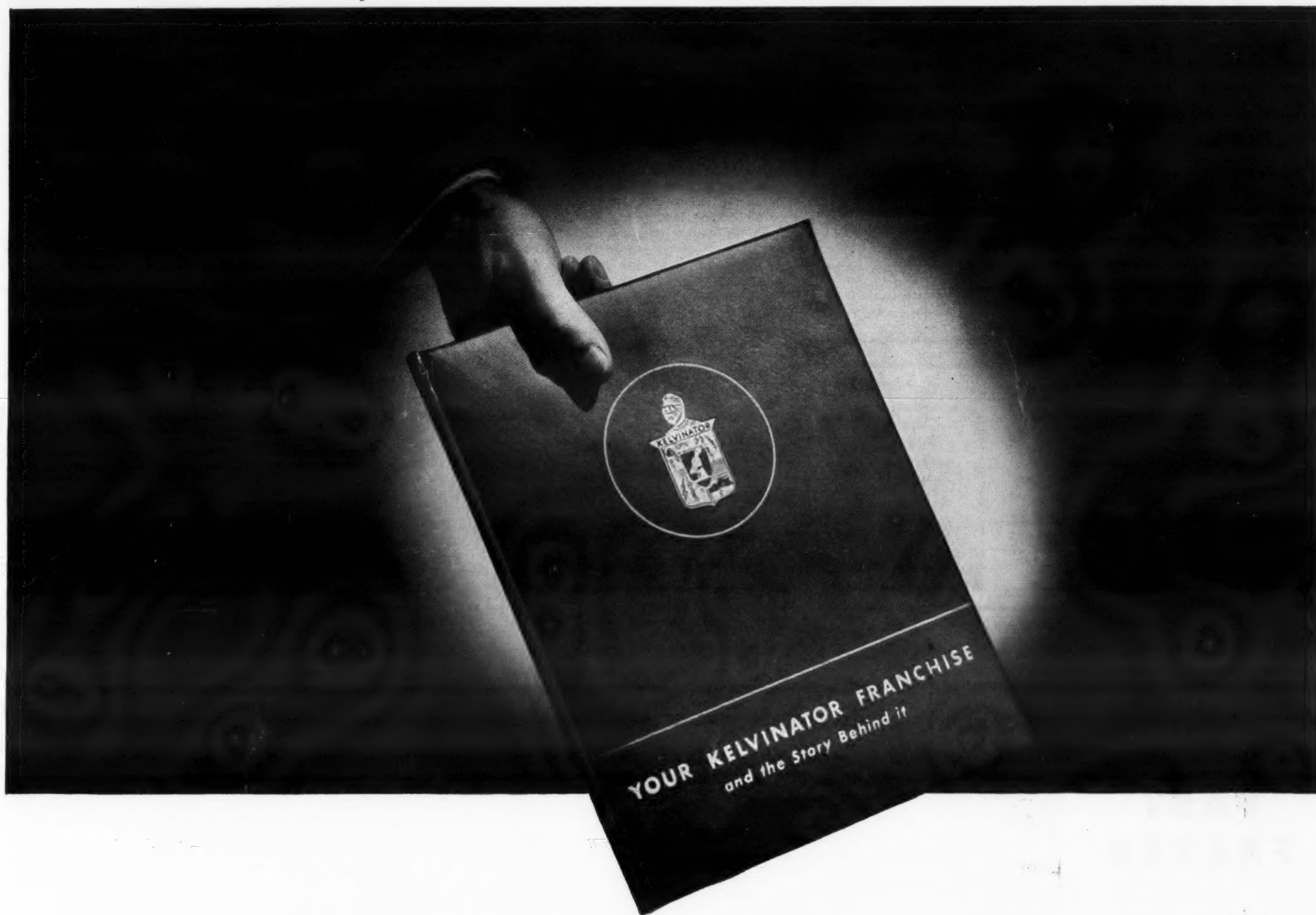
1. A quality line of boiler-burner units, winter air conditioners and conversion burners to cover all types of residential and commercial applications.
2. A merchandising program for the sale of packaged equipment which will lead to more profitable sales.
3. Exclusive distribution rights for the rich New York market.
4. Advertising and sales promotion help backed by extensive national advertising in consumer media for developing the market to its highest potential.
5. Training for engineering departments in application and maintenance of equipment.

The distributor must have:

1. A staff of merchandisers (field representatives) who can select the proper dealers and train these dealers to SELL automatic heating equipment.
2. Engineering "know-how" to assist dealers in surveys, installations, and maintenance.
3. A desire to build up the distribution of this equipment in the territory through active sales promotion and advertising.
4. Adequate financial backing to handle annual sales of at least \$500,000.
5. Warehousing facilities for stocking an adequate inventory for the territory.

Box 2448

Air Conditioning & Refrigeration News



Good reading . . . Again in '47

In the world of business, every now and then an advertisement is published . . . a talk is given . . . a book is written, which makes men pause and think.

"The Kelvinator Franchise" is that kind of book . . . for it contains a message of lasting significance for every member of the Kelvinator dealer family.

Simply, it presents the doctrine of Kelvinator . . . reveals the thinking on the inter-relationship of Kelvinator and the retailer . . . defines the retailer's opportunity under the Kelvinator franchise.

Clearly it expresses the retail-minded principles of Kelvinator . . . provides the logical foundation upon which the retailer's business plans can be laid and his future charted. And by its conception of a successful marketing relationship, it sets a common ground on which retailer, distributor and factory meet to the benefit of each other.

Here is the story of a team that thinks and operates as one unit. For the retailer, as well as the manufacturer and distributor, had a part in formulating the fundamental policies which make the Kelvinator franchise great. From the retailer's experience came many of the basic principles: Concentration of Outlets—an adequate market for every dealer . . . an adequate dealer for every market. Concentration of Line—limiting the number of models to the popular, needed sizes and types.

Kelvinator's continued adherence to these principles—the "retail-minded thinking" backed by products that are unmatched in quality and competitively priced—has produced a family organization that grows stronger day by day.

It is this story of a future, sure in success, that makes the Kelvinator Franchise—"Good Reading . . . again in '47!"

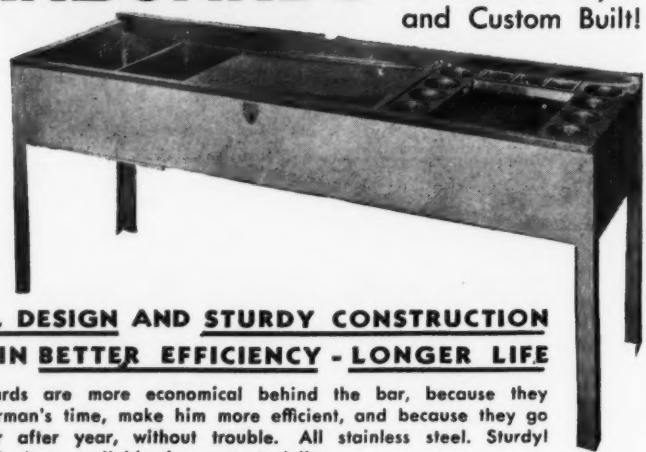
You build a future with **RETAIL-MINDED** *Kelvinator*

THE MOST VALUABLE FRANCHISE IN THE APPLIANCE INDUSTRY

DIVISION OF NASH-KELVINATOR CORPORATION • DETROIT 32 • MICHIGAN

WORKBOARDS ... Standard Styles and Custom Built!

Write
for
Bulletin
No. 43



PRACTICAL DESIGN AND STURDY CONSTRUCTION PAY OFF IN BETTER EFFICIENCY - LONGER LIFE

Perlick Workboards are more economical behind the bar, because they conserve the barman's time, make him more efficient, and because they go on serving year after year, without trouble. All stainless steel. Sturdy! Many styles and sizes available for prompt delivery.



NEW NO. 47 CATALOG

NOW OFF THE PRESS

WRITE FOR COPY ON YOUR LETTERHEAD TODAY

REFRIGERATION PARTS
AIR CONDITIONING AND
HEATING SUPPLIES

THE SUPPLY HOUSE THAT SERVICE BUILT

SERVICE PARTS COMPANY

2511 LAKE STREET, MELROSE PARK, ILL.



June Excise Taxes Top \$3 Million; Triple '46

WASHINGTON, D. C.—Manufacturers' excise taxes collected in June on refrigerators, air conditioners, etc., brought the U. S. Bureau of Internal Revenue \$3,444,953.76, more than three times the \$1,049,029 the government collected for the same month last year, the Bureau has reported.

Collection boosts also were made in electric, oil, and gas appliances; radio sets, components, phonographs, etc.; and phonograph records, the Bureau declared.

Electric, oil, and gas appliances brought the government \$5,830,245.82 in excise taxes this June, compared to \$3,005,554 last year.

Radio sets, components, phonographs, etc., returned to the government \$6,239,485.41 this year, and \$3,118,316 last year.

Phonograph records brought \$869,755.92 in excise taxes in June, 1947, and \$579,085 in June, 1946.

Illinois Distributorship Formed for Monitor Line

CHICAGO — Formation of the Monitor Corp. of Illinois to distribute exclusively in Illinois and portions of Indiana appliances manufactured by the Monitor Corp., New York, has been announced by Joe Hauser, president of the Illinois firm.

Other officers of the new enterprise include Jack Arnoff, vice-president, and Eli Hauser, secretary treasurer.

Instalment Plans--

(Concluded from Page 1, Column 2)

are uneconomic, Mr. Wynegar said. Regulation W, Federal wartime measure, which curbed down payments and the number of months over which instalments could be spread, is slated for Congressional abolition on Nov. 1. Under the wartime power, buyers of automobiles costing under \$2,000, refrigerators, washing machines and other home appliances were required to pay one-third down and complete their payments within fifteen months.

The sales finance corporation's policy was restated recently in a bulletin sent to its local offices.

"When the Regulation is amended or discontinued it is possible that some elements in the merchandising and financing world may immediately feature some application of 'a dollar down and ...'" the bulletin stated.

"It has always been and will continue to be our policy to encourage the use of reasonable instalment terms in order to sell merchandise and, conversely, we are opposed to the practice of selling terms instead of merchandise."

Directs Wilson Move



PAUL A. HUNKER

Wilson Expansion--

(Concluded from Page 1, Column 2)

mercial refrigeration products through department stores, syndicate purchasing agencies, national and private brand accounts.

Mr. Hunker said that after launching the urban distribution program in the metropolitan New York and Chicago areas, he will later extend his activities to other cities in keeping with the domestic and export sales expansion plans of Wilson.

He is well known in the refrigeration field, having formerly been affiliated with the General Electric Co., General Electric Distributors, and Rex Cole, Inc.

They Wait In Comfort At This Bus Station

WINSTON-SALEM, N. C.—Air conditioning has provided even summer and winter temperatures for the millions of bus passengers who have used the Greyhound station here since its opening in 1942, William E. Stillwell, station manager, testified recently.

Conditioning is provided by two 25-hp. Chrysler Airtemp radial compressors, he said.

Frozen Food Council--

(Concluded from Page 1, Column 4)

care in handling from field to user.

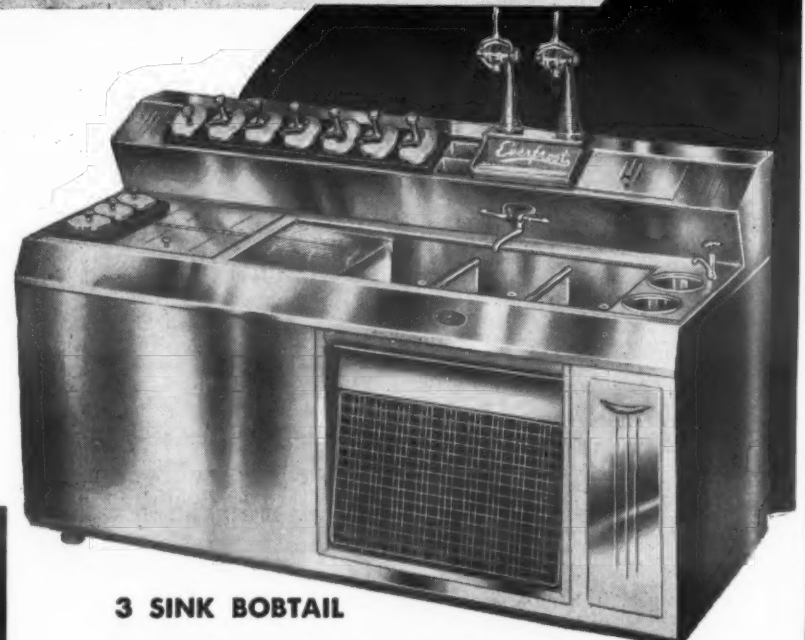
Representatives of the National Association of Frozen Food Packers, National Wholesale Frozen Food Distributors, and the National Food Brokers Association make up the Council's nine-man governing board. They are:

C. Courtney Seabrook, Seabrook Farms, Bridgeton, N. J.; George L. Mentley, Birds Eye-Snyder Division, General Foods Corp., New York; F. J. Becker, Gresham Berry Growers, Gresham, Ore.; Benjamin T. Smith, Pratt's Frozen Foods, New York; Alvin W. Langfield, Frozen Food Distributors, Inc., Oakland, Calif.

A. W. Huss, A. W. Huss Co., Milwaukee; Fritz Brahm, Ashenfelter & Morrow, Inc., New York; Clyde L. LeBaron, Clyde LeBaron Co., San Francisco; and Ed W. Jones, Meinrath Brokerage Co., Kansas City.

Representatives of retail distributors, refrigerated warehouses, transportation groups, and other related industry groups are expected to occupy chairs on the Council.

HIGH IN QUALITY--

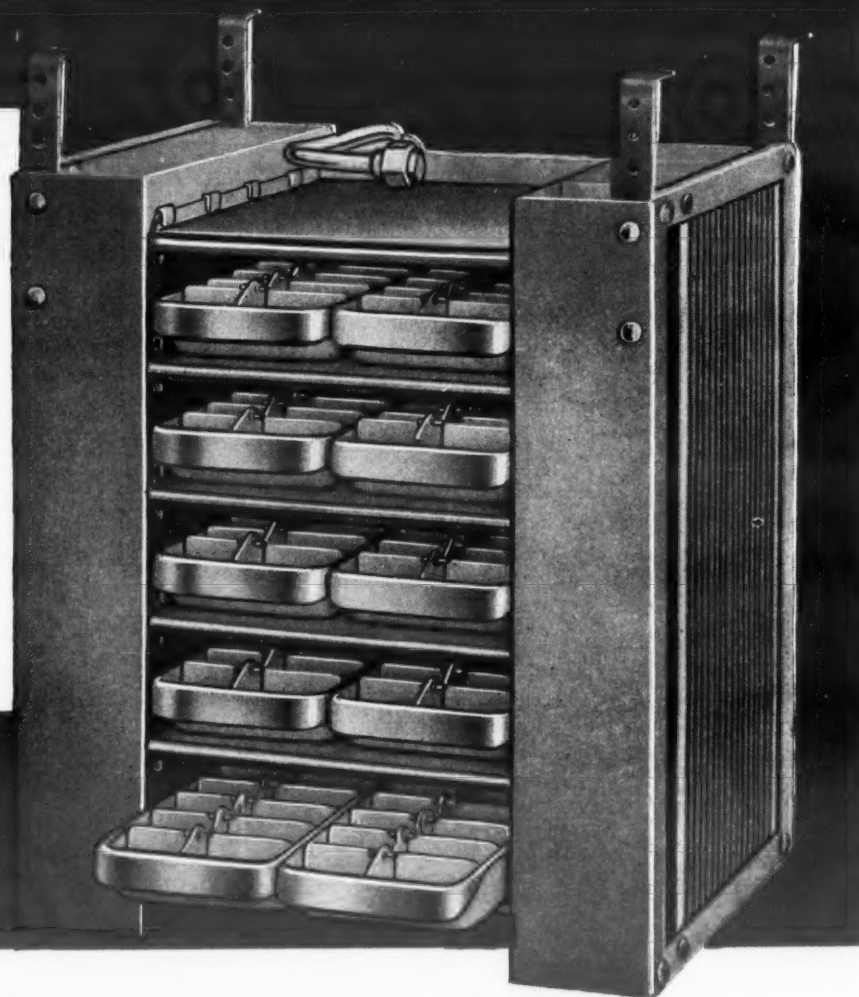


3 SINK BOBTAIL

Aggressive fountain dealers who want a high quality line of fountain equipment will find that "Everfrost" will give them a complete line of equipment that is priced right. Two and three sink bobtails... complete soda fountains with or without sink sections... ice cream cabinets and luncheonette equipment. Here is a line which will be a real money maker for you. Write or wire today for complete franchise information.

ANDERSON & WAGNER INC.
8701 South Mettler Street • Los Angeles 3, Calif.

**FAST
FREEZE
QUICK
RELEASE**



McQuay ice cube makers offer capacity plus convenience

Heavy duty cube freezing for reach-in and back bar installations plus compartment cooling is a one unit job for the McQuay Combination Ice Cube Maker. Fast freezing of cubes in special quick release trays, makes a generous volume of ice conveniently available for peak hour service. Special fin coil panels keep compartment areas chilled.

Fast freeze... big volume cube production is also available in standard McQuay Ice Cube Makers designed for installation in compartments where refrigeration temperatures of 45° F. or lower are maintained. Aluminum construction with electro-tin-plated copper tubing.

Efficiently designed for its dual job, the McQuay Combination Ice Cube Maker is constructed of heavy gauge aluminum with aluminum fins hydraulically bonded to electro-tin-plated copper tubing in the fin coil panels. Flat, U-shaped electro-tinned copper loops in the freezing section provide increased area of contact with the tray shelves for more rapid heat transfer and faster freezing. McQuay's exclusive construction is the secret of the unit's highly efficient compartment cooling performance.

For further information regarding your special needs see your refrigeration wholesaler or write McQuay, Inc., 1607 Broadway Street Northeast, Minneapolis 13, Minnesota.

Representatives in Principal Cities



McQuay

EVERY PHASE OF AIR CONDITIONING



Spot Advertisements On Beverage Coolers, Other Items, Up Sales

'Miscellaneous Column' Is
Used by Pittsburgh Dealer

PITTSBURGH — Consistent spot newspaper advertising has resulted in growing equipment sales by Goodyear Store Fixture & Refrigeration Co., 3811 Penn Ave., reports F. S. Spero, owner.

The Goodyear Co. is the largest advertiser in the newspapers' "miscellaneous" column for store equipment and fixtures in this area. The company spends about \$1,000 with one newspaper alone, and three times as much in miscellaneous column newspaper advertising as any competitor.

"We started a newspaper advertising campaign in three Pittsburgh newspapers, and in 12 out-of-town newspapers in western Pennsylvania, from Erie to Harrisburg, plus in telephone directories.

"We believe in spot ads," says Mr. Spero. "When a man wants a meat case, he doesn't want something else. Same with a bottle cooler. And he will go to the miscellaneous column and hunt through it for the item he needs."

Mr. Spero started his own business in 1931 after working for Westinghouse and spending 14 years with Danforth Co.

While working for another house, Mr. Spero noticed the large number of calls for items the firm didn't handle. "Although we were selling refrigerated cases," says Mr. Spero, "people would call us right along for all sorts of odd items like cash registers."

Without salesmen during the war, Goodyear company did a tremendous volume with newspaper advertising.

"That advertising we did during the war," he says, "pays us even now. Business people don't have much time to go shopping. They grab their newspaper to find items."

Goodyear advertisements appear in papers from Erie to Harrisburg, reach out into other states. Orders come in even from Canada, from the railroads, leading steel corporations. These large clients are very good accounts, steady customers. In addition, a monthly advertising campaign sends blue-and-white circulars to active accounts.

Goodyear brings in half its business with newspaper advertisements, 20% from direct mail, 30% from the showroom and direct contacts. There is very little canvassing, but if a reputable account phones Mr. Spero at 2 a.m. at a club and it's strictly business, he will go.

Spot check of Mr. Spero's advertisements reveals the formula used. He sells one type of item only in each advertisement. He emphasizes in heavy type at the bottom of the advertisement the company name, street address, phone number, using two uncrowded lines. Name of the item appears at top of advertisement.

The advertisements read well, with sales lines like: (1) "lowest price in the city," (2) "all sizes," (3) "immediate delivery," (4) "cash or terms," (5) new or used," (6) "commercial and home sizes," (7) "most anything and everything," (8) "all styles."

Goodyear has roughly 30,000 sq. ft. to three showrooms and six store-rooms plus a loading dock. Heavy traffic from outlying Wilkinsburg, Braddock, finds unlimited, unmetered parking at Goodyear's and often saves itself a trip into Pittsburgh.

Mr. Spero says, "We handle a complete line of restaurant, butcher shop, cafe equipment. In outfitting remodeled establishments, we plan and sketch the merchant's layout for him, planning a place for everything. Often we sell him equipment he didn't think he had room for."

To "keep up," Goodyear remodels every year. "We change the doors around," says Mr. Spero, "alternate the front, paint a different color scheme. Next trip the customer makes to our establishment, we look different!"

"Mr. Spero believes 1948 will be a good year for the management which keeps a good rating. He scorns extravagance, appears very conservative. "I am all business," he says, "have a family, and owe them everything."

PRICES
CUT 15%
TO DISTRIBUTORS
TO DEALERS

RETAIL PRICE NOW ONLY \$385 f.o.b. factory



The cost per cubic foot of usable refrigeration space in this size range is probably the lowest in the history of commercial refrigeration.

NEW

saves
SPACE
FOOD
PROFITS
ONLY COOLER
OPERATED EITHER
WET OR DRY!

Artkraft BEV-FOOD

COMBINATION FOOD AND BEVERAGE COOLER

THE ONLY COMBINATION COOLER THAT CAN BE OPERATED
WET OR DRY

Can be used entirely for dry refrigeration from bottom to top of each compartment. Top opening of wet or dry compartment prevents spill-out of cold.

A self-contained "plug-in" unit engineered for outstanding performance.

SUCCESSFULLY PRESERVES—
WITHOUT INTERMINGLING OF FOOD ODORS:

Hamburger—at normal temperatures for 30 days.
Sweetbreads—ten days without spoilage.
Steaks and chops—almost indefinitely.
Fish—better than ice.
Fowl—almost indefinitely.
Cream pies—for a week or more.

THE IDEAL UNIT FOR

RESTAURANTS
ROADSIDE STANDS
DAIRY STORES
RECREATION
CENTERS
HOTELS

TAVERNS
FISH MARKETS
FACTORY
CAFETERIAS
HOSPITALS
SODA FOUNTAINS

BEVERAGE BOTTLERS
BOWLING ALLEYS
MEAT MARKETS
DELICATESSENS
CANDY STORES
DRUG STORES

DEALERS:

ASK YOUR DISTRIBUTOR FOR THIS GREAT PROFIT-MAKER—OR
WRITE US FOR HIS NAME. DISTRIBUTED IN MANY AREAS BY
G.E. SUPPLY CORP.

DISTRIBUTORS:

WRITE FOR DETAILS OF FRANCHISE FOR OPEN TERRITORY

THIS COUPON FOR YOUR CONVENIENCE

THE ARTKRAFT MANUFACTURING CORPORATION
200 KIBBY ST., LIMA, OHIO, U.S.A.

- ☐ Please send more details on BEV-FOOD.
☐ Please send the name of the BEV-FOOD distributor in this territory.
☐ Please send details of distributors' franchisees.

NAME.....
FIRM.....
CITY.....

The Artkraft Manufacturing Corp.

Quality Products for a Quarter of a Century
200 KIBBY ST., LIMA, OHIO, U.S.A.

Sealed Cabinet—Solid 3" insulation—Vermin-proof.
Cabinet Dimensions65 1/2" x 38" x 29 1/2".....
RefrigerantF12 Freon.
Condensing UnitQuarter Horse-Power, Twin Cylinder Air Cooled. Equipped with Tecumseh or Universal Unit.
MotorQuarter Horse-Power, 60 Cycle, Single Phase, 1750 R.P.M., 110 Volts, Capacitor Type.
Exterior FinishSilver Blue.
Top of CabinetStainless Steel with 2 Stainless Steel Sliding Covers.
Bottle CapacitiesTop Compartment—Standing: 104 12 oz. bottles, lying: 192 12 oz. bottles.
Side Compartment—Standing on Shelf: 49.
Standing Below Shelf: 64, or lying down: 150 12 oz.
Food Storage DimensionsSlightly more than 7 1/2 cu. ft. (plus 6 1/2 cu. ft. in top compartment, total 14 cu. ft.).
Food Compartment Dimensions.....21 1/4" wide; 28 3/8" high; 20 1/2" deep.
LightingAutomatic Light in Food Compartment.
Finish (Interior)White Porcelain Enamel.
Top Compartment Dimensions.....35 1/2" high x 20 1/2" wide x 15 1/2" deep. (Slightly larger than 6 1/2 cu. ft.)
Cold Control8 point.

BTC FOOD FREEZERS

Win Consumer Confidence
and SALES



Consumer confidence and sales can be obtained and held only with properly engineered low temperature food freezers. BTC Food Freezers are soundly engineered to deliver the essential performances of rapid freezing and constant temperature storage.

Note these basic construction and refrigeration features built into BTC Food Freezers:

- Separate Sharp Freeze Section
- Vapor-Sealed Insulation
- Adequate Storage Compartments
- Non-Heat Conducting Lids
- Solidly-built 16-ga. Steel Cabinet
- Extra Compressor Capacity

Customers will not long be satisfied with inadequate "cold storage boxes." The BTC Food Freezer line, in sizes 10, 12½, 18, and 23 cubic feet, offers true home and farm food freezing performance on which permanent sales relationships can be built. A limited number of dealer and distributor franchises are available. Write for full information.

THE BREWER-TITCHENER CORPORATION
CRANDALL-STONE DIVISION --- BINGHAMTON, N. Y.



10 CUBIC FEET



12½ CUBIC FEET



18 CUBIC FEET



23 CUBIC FEET

Home Freezer at 40° F. Can Sub for Refrigerator

CHICAGO — Selling a Crosley Frostmaster freezer equipped with a 40° F. cold control as a temporary substitute for a refrigerator is the latest idea to come out of the Harry Alter Co., Crosley distributor here.

When deliveries on a Crosley Shelvador cannot be made immediately, the Alter company advises dealers to:

"Sell the customer a Frostmaster equipped with a cold control so that it will store food at 40° F. but won't freeze. This will tide the customer over, with an improvised refrigerator.

"Then when you are able to give the customer a Shelvador, put a freezer cold control back in the Frostmaster. You make two sales—you hold the customer and satisfy him also."

Frisco F.F. Specialty Store First of Proposed Chain

SAN FRANCISCO — First of a projected chain of 200 frozen food specialty stores equipped with a complete grocery department is the new Eezy-Freezy Food Store here.

New units are planned as soon as conditions permit, with the chain gradually expanding from northern California to the southern part of the state.

Headquarters of Eezy-Freezy are at 1800 Peralta St., Oakland. Edmond E. Herrscher, president of Andrews Williams Stores, is president of the frozen food chain as well.

Riha's Real Life 'Package Kitchen'



Above is a view of Frank Riha's kitchen, which he uses to give on the spot demonstrations of the operation of all the kitchen appliances, from the well-stocked refrigerator in the background to the electric mixer not shown in this picture.

Dealer Shows Customers How Appliances Work In His Own Home Behind Showroom

LOS ANGELES — One of the most common complaints associated with "package kitchen" display of appliances, cabinet sinks, and other items to represent a modern, streamlined kitchen, is the fact that most appear completely lifeless. Many appliance dealers report that women state "There's something missing" in examining even the most carefully worked-out model kitchen display.

When Frank Riha, head of the Western Beverly Plumbing & Heating Co., Los Angeles, set up his new \$33,000 major appliance showroom, he insured plenty of active "life" in his packaged kitchens by utilizing this as the connecting link between private living quarters in the back of the building, and the 2,000 sq. ft. showroom at the front.

Living Quarters Scarce

"When I opened up my new store, living quarters in Los Angeles were at a premium," Mr. Riha grinned. "Therefore, it seemed a logical thing to include a full-size apartment in the back of the building, which could later on be converted into a parts storeroom, service shop, etc. At the same time, I felt, I could demonstrate kitchen appliances actually in use by making the kitchen serve two purposes.

"We cook all meals for ourselves and our two children in the kitchen, keep the refrigerator stocked with food, range in use, dishwasher operating three times a day, etc., and bring our prospects back from the showroom into the kitchen, which has three separate entrances.

"Closing off two of the doors gives us complete privacy in the living

quarters, while prospective model kitchen customers can get a much better idea of the workmanship and practical use of the appliances."

Mr. Riha's model kitchen, which he can reproduce at from \$1,100 to \$1,500 in most Los Angeles homes complete, consists of an automatic water heater, refrigerator, range, dishwasher, garbage disposal machine, two tiers of cabinet shelving, a cabinet sink, mixers, toasters, waffle-iron, electric grille, and a small kitchen radio.

Even the Odors Are There

Customers brought back into the model kitchen find the display room redolent with the fragrance of a roast being cooked, the automatic dishwasher warm and sudsy from recent washing, the refrigerator fully stocked with foods, etc.

When Mr. Riha wants to demonstrate the dishwasher in action, he need merely reach into the cabinet and place a few dishes in it, getting the soap from Mrs. Riha's cabinet below. If the customer wants to see a mixer in action, Mrs. Riha is quite willing to whip up cookie dough, pancake batter, etc., to be served to her own family a little later on.

The result? "We put over sales points in a solid manner which could not be accomplished otherwise," Mr. Riha smiled. "Frequently, prospects demand to have a model kitchen of exactly the same dimensions and layout as ours. Of course, I'm not advocating that all dealers move into their stores—but under the circumstances, giving our model kitchen a dual purpose has been one of the most successful selling ideas."

THE FINEST NAME IN ELECTRIC COOKING

Since

1929



FINE products become leaders only through a quality that is inborn — the result of superior engineering, professional design and precision workmanship.

Since 1929, Electromaster has been a trail blazer in electric cooking. Specializing exclusively in the manufacture of electric ranges, it has pioneered many of the major design and engineering features that have become universally adopted by the industry.

With a name that has stood for the finest since 1929, backed by a huge new plant and by a national advertising campaign, Electromaster distributors and dealers have a splendid opportunity to capture sales leadership in their communities.

LOOK FOR BIG NEWS FROM ELECTROMASTER NEXT MONTH

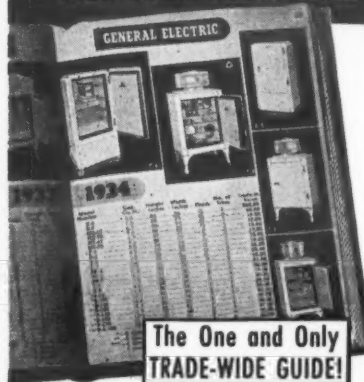


THE BEAUTIFUL
BANQUET MODEL

Electromaster Inc.
MOUNT CLEMENS, MICHIGAN

The Electric Range That's "Fit For A Queen" — On The "Queen For A Day" Program — Mutual Network

The STANDARD Reference Manual on REFRIGERATORS and FREEZERS



**NEW 1947-1948
EDITION
NOW IN PRESS!**

- More than 1150 photographs
- More than 3300 model specifications
- Authentic trade-in valuations for all household refrigerators marketed since 1928.
- Operating data on Merchandising, Promotion, Reconditioning

Bookbound in washable green cloth—320 pages. Pocket Size—4¾" x 6¼". Price—\$6.00

NOTE — A limited quantity of current (1946) edition still available for immediate delivery.

STANDARD REFRIGERATOR TRADE-IN MANUAL CO. 503 W. 43rd St., N. Y. 18, N. Y.

Please enter my order for _____ copies of 1947-1948 Manual @ \$6.00 each.

Please send me at once _____ copies of 1946 Manual @ \$5.00 each.

NAME _____

STREET ADDRESS _____

CITY _____

ZONE _____

STATE _____

Check or Money Order enclosed ☐ Bill us per enclosed purchase order ☐
(We pay postage on prepaid orders.)

St. Louis Grocer Uses Advertising To Explain Importance of Cooling

ST. LOUIS—In line with their policy of offering important information about food storage and preparation, Moll's, a grocer in the city for almost 100 years, recently devoted an advertisement to explaining the importance of refrigeration and air conditioning in keeping vegetables at "peak perfection."

According to the management, the advertisement was run to give people a fuller understanding of just why refrigeration is so important to produce handling. Topping the vegetable refrigeration advertisement was the statement, "Store Air-Cooled. Our vegetables are bought at peak perfection. Sold at peak perfection."

Then following this was a short explanation of the vegetable handling policy of the store concerning refrigeration and air conditioning. Copy read as follows:

"It is a well-known fact that heat and exposure not only cause vegetables to wilt, but destroy the vitamin content as well. Moll's vegetables are purchased garden fresh, by expert buyers and immediately placed in our huge coolers. When put on display they are further guarded by the controlled temperature of our air conditioned store. When you buy vegetables at Moll's you know that the original food value is still present."

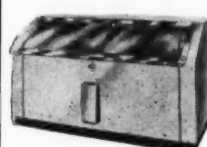
J. Herman Co. Named Airtemp Distributor In Los Angeles Area

LOS ANGELES—Appointment of J. Herman Co., Inc., 2400 S. Main St. here as the exclusive distributor of Airtemp air conditioning and commercial refrigeration products in the metropolitan Los Angeles area has been announced by Airtemp Division, Chrysler Corp.

Airtemp units will be on display in the recently constructed Herman Co. sales rooms at 2408 S. Main St.

Joe Herman, Jr., president of the firm, states that a completely separate engineering, service, and sales staff has been assigned to the marketing of the Chrysler equipment and the setting up of sub-dealerships.

DEALERS WANTED



The Bevo-Kold Cooler
Dulux Baked Enamel—
White, Green, Beige

Model DB 6-21
Self-Contained
29 1/2" x 40" x 6' long
Also 4, 8 and 10' Lengths

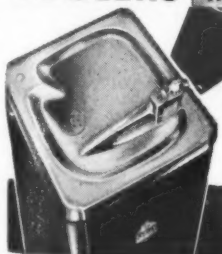
Remote Installation
36 1/2" High
Write For Details

THE BEVCO COMPANY



1512 PINE ST., ST. LOUIS 3, MO.

TOPS IN WATER COOLERS



You get the best in thirst-quenching convenience with OASIS. Built by EBCO, they're backed by 20 years of water cooler leadership.

THE EBCO MFG. CO.
401 W. Town St.
Columbus 16, Ohio

GENUINE MAYFLOWER AIR CONDITIONERS



Air Conditioners
Licensed Under
U. S. Patents
No. 2,048,246
No. 2,055,528

MAYFLOWER PRODUCTS, INC.
13 S. 3th St., Richmond, Ind.

Big Show Filling Up

All-Industry Show Exhibitors Near '46 Total With 152 Companies Signing Up for Space

PITTSBURGH—Six months before the 5th All-Industry Refrigeration and Air Conditioning Exposition in Cleveland, Jan. 26-29, it has been announced that the assignment of just 14 more exhibit spaces will assure a show the size of last year's, which covered 75,000 sq. ft. and four exhibition halls.

A total of 152 companies and associations already has taken 203 spaces, according to the Refrigeration Equipment Manufacturers Association, sponsors of the 1948 show. F. J. Hood, show chairman, has

listed the following names of new exhibitors not previously announced:

Thiel Mfg. Co., Fleischman Freezer Co., Inc., Econofreeze Mfg. Co., Inc., Redmond Co., Inc., National Commercial Refrigerator Sales Assn., McCray Refrigerator Co., Cleveland Graphite Bronze Co.

Aluminum Co. of America, Brewster-Titchener Corp., Refrigeration Equipment Wholesalers Assn., National Association of Refrigeration Contractors, Refrigeration Service Engineers Society, The American Society of Refrigeration Engineers.

Weber Announces Plans For Texas Grocers' Show

LOS ANGELES—Weber Showcase & Fixture Co. has completed arrangements for appearance at the Texas Retail Grocers Association Convention at San Antonio, Texas, Aug. 17-20.

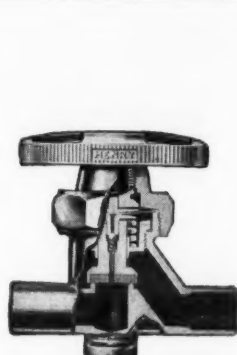
Weber's El Paso plant will complete all arrangements for staging the exhibit. Sales personnel to man the displays will be drawn from the Texas territory.

Delegates to the show will have the opportunity of winning a Porta-Freeze unit on a door prize drawing at the Weber display. Two of these units will be given away during the course of the show.

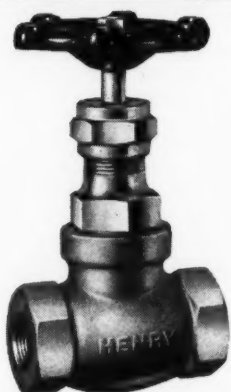
Carrier Appoints Martin Atlanta Distributor

ATLANTA, Ga.—Charles S. Martin Distributing Co. of Atlanta, has been named Georgia distributor for Carrier room and office air conditioning units as well as Carrier food freezers was announced this week by Carrier Corp., Syracuse, N. Y.

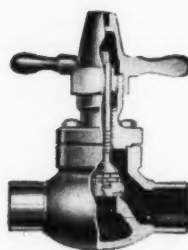
Charles S. Martin, president of the Atlanta firm, held a meeting of dealers from all parts of Georgia to show them new models of Carrier equipment. He reported there was great demand in the South from home owners, dentists, doctors, and other professional men, as well as hospitals, for room air conditioners for both health and comfort reasons on a 12-months basis.



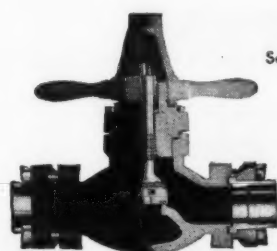
PACKLESS VALVE
Ports-in-line. With or without balanced-action



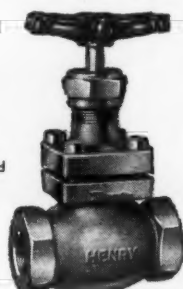
AMMONIA VALVE
Screwed bonnet



WING CAP VALVE
Non-ferrous



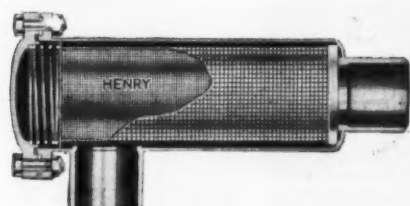
WING CAP VALVE
Semi-steel—with adapters



AMMONIA VALVE
With bolted bonnet—screwed or flanged connections



GAUGE GLASS ASSEMBLIES
Left: Brass Diaphragm Packless type
Right: Steel valve assembly

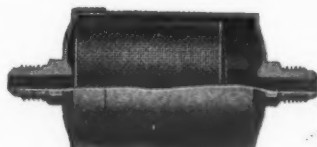
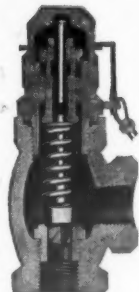


STRAINER
Angle type with patented distortion-proof flange

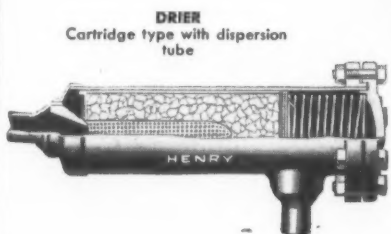


"Y" STRAINER
Welded steel with solder or F.P.T. connections

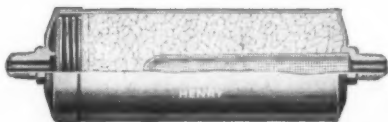
RELIEF VALVES
Below: Snap Action Relief Valve (Brass)
Right: Ammonia Relief Valve



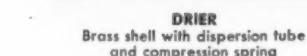
STRAINER
Soldered shell. Choice of mesh



DRIER
Cartridge type with dispersion tube



DRIER
Refillable type with dispersion tube



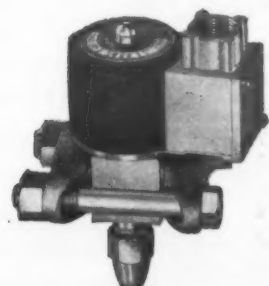
DRIER
Brass shell with dispersion tube and compression spring



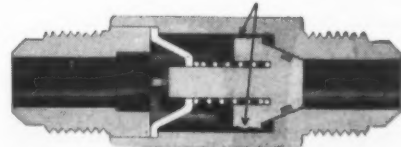
SOLENOID VALVE
1 ton "Freon" mounted in standard electrical outlet box



SOLENOID VALVE
10 ton "Freon" brass body with come-apart construction



SOLENOID VALVE
10 tons Ammonia with come-apart construction and hardened steel renewable seat



CHECK VALVE
New straight through flow (Piston guides not shown in order to illustrate flow passage)

write for these catalogs:

- No. 97 Packless and packed valves, strainers, driers, and other accessories for air conditioning and refrigeration and industrial uses.
- No. 65 Ammonia valves and accessories including check valves, relief valves, three-way valves, scale traps and liquid gauge sets, flange unions and nut unions.
- No. 68 Drop forged and cold rolled steel fittings.

SOLENOID VALVE BOOKLET

HENRY VALVE COMPANY

Control Devices, Valves, Driers, Strainers and Accessories for Refrigeration and Air Conditioning and Industrial Applications

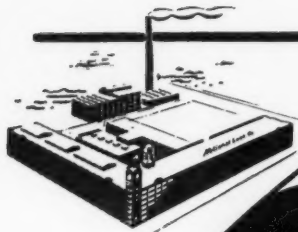
3260 W. GRAND AVENUE • CHICAGO 51, ILLINOIS

Cable: HEVALCO CHICAGO



Headquarters

REFRIGERATOR HARDWARE
for domestic, commercial and
low temperature cabinets



**SURFACE TYPE
HARDWARE**

**"THRU THE DOOR"
HARDWARE**

EDGE MOUNTED HARDWARE

PLASTICS

DIE CASTING



NATIONAL LOCK COMPANY
Refrigerator Hardware Division
ROCKFORD, ILLINOIS

INSIDE DOPE

by **GEORGE F. TAUBENECK**

(Concluded from Page 1, Column 1)
is the immutable bedrock of Soviet foreign policy:

"It is inconceivable that the Soviet Republic should continue to exist for a long period side by side with imperialist states—ultimately one or the other must conquer."

"Imperialist states means us. And this, mind you, is not something Stalin said in the 1920's, or before the pact with Hitler, or before the war, or last week, or yesterday. It is what he is saying right now in 30 languages to hundreds of millions of people. The book containing this notification of our doom is being currently shipped about our country in an excellent English translation that sells at 25 cents a copy."

Indeed, "the only difference is that the enemy has changed its name," and the battle line now drawn reaches all around the world, and all of the world's people are arrayed on the one side or the other.

The same enemy under many names has defeated free men since the earliest conception of individual freedom. Again and again the forces of darkness and reaction and paganism have prevailed because men have never, for any considerable time, been willing to pay the price of staying free. "Eternal vigilance is the price of liberty," but the soft generations that succeed the founders of free nations do not practice vigilance.

A very small part of the people of the world ever has been free, and, most unfortunately, people who for a time have embraced freedom have been deprived of their heritage, not by the enemy's strength but through their own weaknesses. As Daniel Webster remarked, "God grants freedom only to those who love it and are always ready to guard and defend it."

They Studied History

The wise, brave men who founded this nation knew that earlier nations of free men had not long survived. They knew that free nations had died from internal disabilities and that their conquerors captured people already weakened unto death by their own indifference and dissensions. The founding fathers knew well the history of the rise and decline of freedom in Greece and in Rome and among the Arabs. They knew that Rome had long been rotting internally before Rome was overthrown by the Barbarian Invasion. They understood the terrible results of Rome's fall, so well described in the words of George Sokolsky:

"The East has often invaded the West both physically and through the impact of ideas. What is so often called the Barbarian Invasion represented not only the collapse of Rome as a world power but the clouding of a brilliant advance of mankind by the blackening storms of the nomads out of the steppes of Asia, pressing before them European tribes that had not yet been enlightened by the religion and law, the wisdom of the Judaic-Christian civilization that had been nurtured and cultivated on the shores of the Mediterranean. For more than 500 years, Europeans lived in the darkness."

"Yet, throughout it, missionaries spread not only the form but the word of Truth, even among those whose minds and hearts were not yet ready to receive it."

Those prescient men who founded this nation were well aware of the long struggle through which their English forebears, by one painful step after another, had wrested a degree of freedom from their kings—until in 1612 Chief Justice Coke could admonish King James I that he could rule England only "under God and the law."

Knowing these things and fearing internal disintegration above all other

hazards, the founding fathers designed not a democracy but a republic. Are you fully aware of the implications of that fact?

Well aware of the long, difficult history of freedom and of its repeated failures in older nations, the founders of this nation created three distinct branches of government carefully designed to exercise restraints one upon another. They visualized strong state governments and a federal government of very limited powers. Their philosophy was epitomized by this statement: "That government is best which governs least."

You will note that the founders of this nation designed our institutions primarily to save us from ourselves. They knew that we could resist external aggression in the degree to which we developed and maintained internal strength. Today, as never before, we must concern ourselves with recovering and increasing the internal strength and solidarity of the nation. To fail in this undertaking is to invite destruction.

Back to Fundamentals

Under a government so carefully designed to foster individual freedom, a government in which the state was not our master but our instrument, a government in which the managers of the state were not our rulers but our servants, the nation grew and prospered amazingly, and our amazing growth and prosperity were directly traceable to the design for living so carefully wrought by the nation's founders.

Let's examine that statement carefully.

The fact that the people of the United States have achieved the world's highest and most widely distributed material living standard will be accepted by this audience as a statement of obvious fact. Almost equally obvious is the fact that our high material living standard is the direct reflection of a degree of productive efficiency not heretofore or elsewhere attained.

These conditions are not accidental. Nor are they traceable solely to our wealth of natural resources or to unassisted providence. A well-defined, evolutionary pattern is clearly apparent as we examine the philosophy upon which the republic was founded, and as we review the industrial history of the mighty nation which rose to tremendous power out of that philosophical background.

OPPORTUNITY

**DISTRIBUTORS NOW BEING
APPOINTED TO SELL THE NEW
STREAMLINED *Temprite*
WATER COOLERS**

This is your opportunity . . . your golden opportunity to establish your company in the water cooler market. You can do it with the smart, streamlined Temprite!

Look closely at those smooth, flowing lines. You'll notice that it's different . . . without being radical. There's real eye-appeal here! There's real sales appeal in its sturdy, well-engineered cabinet, its all stainless steel top and its genuinely modern appearance!

There's dependable long life in its high capacity cooling system . . . built by Temprite and guaranteed by Temprite! Many valuable territories open. WRITE NOW!

Meets all requirements of the Department of Commerce, Bureau of Standards, Spec. No. CS-127-45



TEMPRITE PRODUCTS CORP.

Originators of Instantaneous

80° 40°

Liquid Cooling Devices

43 PIQUETTE AVENUE

DETROIT 2, MICHIGAN

Amcoil Extended Surface Fin

Increases Capacities. Pat. No. 2,402,262

now you can sell

AMCOIL'S FOOD CONDITIONER

for

DISPLAY CASES

Amcoil's fast-selling food conditioner—now for display cases!

The Amcoil Display Case Food Conditioner* does the double job quality foods demand—cools . . . and conditions food, too . . . without dehydration.

Now, you can give customers what they want—the pay-for-itself Amcoil unit that keeps foods fresh, cuts spoilage, and costs little to operate.

Here are the Amcoil facts—that-make-sales . . . easier!

- Complete with expansion valve.
- Humidities up to 85%, cooling down to 36°F.
- Installed without remodeling display case.
- Low Operating Cost.
- Thin—wastes no usable space.
- Good-looking . . . compact . . . sturdily built.

You can reap good profits if you ACT NOW. This recently developed Display Case Food Conditioner is just one of the many fast-selling items in the Amcoil line.

For the same story in walk-in boxes sell the Amcoil Deluxe or Utility Food Conditioner.

Immediate deliveries—send in your order today!

* Pat. No. 2,419,477

DEALERS, DISTRIBUTORS, WHOLESALERS! AMCOIL's National Advertising Helps You



Advertising in these National consumer publications helps make your selling job easier.



DISTRICT OFFICES: Philadelphia: 250 North 15th Street, Rittenhouse 6-9563
Chicago: 215 W. Ontario Street, Superior 4859

MANUFACTURER'S REPRESENTATIVES

A. J. Nelson Co., 1635 Blake St., P.O. Box 2244, Denver, Colo. • William D. Keefe, Chaffee, New York • J. York Feitel, 813 Howard Ave., New Orleans, La.
Robbins-Greenwood Co., 3104 Main St., Houston 4, Texas • J. E. Oliphant & Co., 505 Uhler Bldg., Marion, Ohio • Wm. G. McGuire, 691 Yorkshire Rd., N.E., Atlanta, Ga. • Russell Sales Co., 1421 S. Broadway, Los Angeles 15; 666 Mission St., San Francisco 5, Cal.; 1553 N. 37 St., Seattle 3, Washington

From Frozen Borsch to Commercial Freezers, Casman Has It

By George M. Hanning

DETROIT—One frozen foods dealer who doesn't believe in specializing is William Casman, owner of Eskimo Frozen Food Co. here.

If a customer should enter his store, located in the flourishing University of Detroit section, and want locker space, he shows her to his 60-unit Iceberg locker system.

Does she want a home freezer? He can sell her one. Frozen foods? He has those, too. Wrapping and packaging materials for freezing at home? She has come to the right place.

Not only that, he also sells commercial freezers for small grocery stores that handle frozen foods. And, with his refrigerated truck, he delivers to these stores a line of locally processed and packaged frozen meats.

In addition, he is now taking on a line of frozen specialty items for distribution at the wholesale level. The line includes cube steaks, hamburger patties, beef turnovers, meat wrapped in cabbage, beet borsch, hors d'oeuvres and chicken pies.

Mr. Casman started up in the frozen foods business in February, 1946, after 11 years in the grocery trade. He thought frozen foods were good business then, still thinks so.

When he opened his doors, he found great interest in frozen foods among residents in the neighborhood. He took a large number of orders for both home and commercial freezers and filled them as fast as he could get merchandise.

He rented out 36 of his Iceberg lockers and is now using the remainder to store surplus stock for his retail food case.

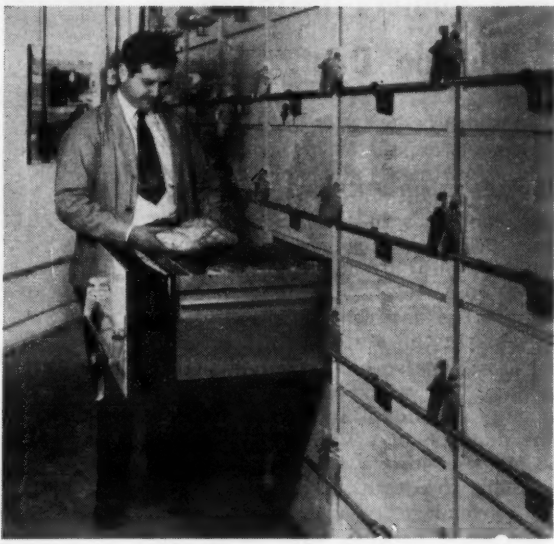
He bought a refrigerated truck with the intention of making house to house deliveries on frozen foods. He soon learned, though, that this requires long hours of work and returns comparatively little profit.

"There is not enough profit in home delivery to cover all expenses," he declared. "The distributor takes as much profit out of frozen foods as the retailer does, and the distributor gets all the volume business. A retailer, making home deliveries cannot afford to handle frozen foods at 30% gross profit."

Mr. Casman now finds that, with the greater availability of home and commercial freezers, the frozen food dealer is getting some real competition from department stores and store fixture houses.

"Local department and appliance stores are currently conducting selling campaigns on home freezers. Supermarkets and grocery stores, quite logically, are buying frozen food cabinets from their regular store fixture houses," he explained.

William Casman, owner of Eskimo Frozen Foods, examines a food package stored in his Iceberg Locker System. The bank of lockers is located in the rear of his store where everything from wrapping paper to freezers is on display.



Paying tribute to the good job of merchandising home freezers that one department store here is doing, Mr. Casman said:

"When a new customer comes into my store and wants to buy pack-

aging materials, nine out of 10 times she has purchased her freezer from that particular department store."

But even with competition like that, Eskimo Frozen Foods is still selling freezers, he indicated.

10,000 Lines of Advertising Launch Freezer Promotion

ST. PAUL, Minn.—More than 10,000 lines of newspaper advertising promoting home freezers appeared in the Minneapolis and St. Paul newspapers recently to open a freezer sales campaign launched by members of the Electrical Appliance Dealers Association here.

This lineage included the first of three advertisements prepared by the association itself and tie-in advertisements inserted by member dealers and distributors.

Realizing that "newspaper messages must be repeated often before we can enjoy a good market on home freezers," the association had scheduled its second and third advertisements of its initial series to run July 29 to 31, and Aug. 5 to 7.

Refrigeration—Portal to Portal

BUFFALO—Nu-Way Markets, food store chain, now ships all its meat by refrigerated trucks to assure complete freshness.

Remco Plant To Make Pre-cooked Dinners

SOUTH HACKENSACK, N. J.—Remco Food Products, with headquarters at 53 Broadway, New York City, has started construction of a \$500,000 plant here for the production of "Remco" pre-cooked dinners.

The dinners, as previously announced by John L. Remco, president, will consist of meats, vegetables, and potatoes on sectional detachable plates which permit various combinations. A new processing method combining electronic pre-cooking and flash freezing has been evolved.

Twelve meats, 11 vegetables, and four styles of potatoes will be produced at the plant. Plates and vending machine dispensers will be made elsewhere.

The plant now under construction will contain about 60,000 sq. ft. of space.

The interchangeable meals are planned for distribution in grocery outlets, restaurants, institutions, transportation stations, and elsewhere.

TWO BEAUTIFUL, NEW INTERNATIONAL HARVESTER FREEZERS *with* SALES-ABILITY PLUS!



Both with
FROST-LOK...VAC-U-SEAL...TIGHT-WAD
and other great Harvester features



Salability doesn't begin to express it... these streamlined beauties offer far more! Built into them, through and through, are quality features that close sales... that really go out after the business. They're proving their SALES-Ability to International Harvester Refrigeration dealers every day.

Customers who come in "just to look" remain to buy, captivated by the smooth, modern lines of IH Freezers... their sturdy, all-steel construction... the silent, efficient, hermetically-sealed TIGHT-WAD unit... the assurance of top freezer performance they see in FROST-LOK and VAC-U-SEAL and other outstanding Harvester features.

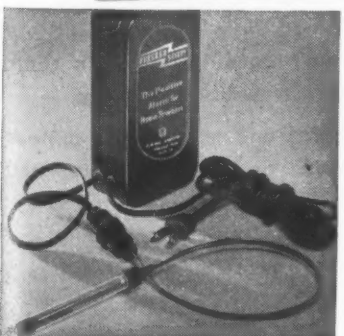
The many refinements of freezer design are apparent. The big, floating lid that opens as if by magic with the touch of a finger; the full, un-

obstructed view of the snow-white interior; the recessed base providing comfortable toe-space, enameled black not to show soil... those are points women, especially, appreciate at a glance. So are the handsome, chrome-plated handle, positive latch, and convenient spaces for placing packages of food while putting them away or removing them.

Is it any wonder, with sales-winning features like these... backed by a 5-year condensing unit warranty and the International Harvester name... that IH Refrigeration dealers are making remarkable sales records? This evidence of SALES-Ability spells dealer security for the buyers' market ahead!

INTERNATIONAL HARVESTER COMPANY
180 North Michigan Avenue • Chicago 1, Illinois

FREEZER SENTRY



THE POSITIVE ALARM FOR ALL FROZEN FOOD CABINETS

• The simplest device you have ever seen to warn of mechanical troubles. Designed for use in any low temperature cabinet. Can be installed in two minutes by anyone.

Buzzer, battery operated. Trickle charger insures five-year battery life. Buzzer operates 100 hours. Actuated at plus 12°F by mercury contact. No thermostat to get out of order. Action is as positive as gravity.

A package item that sells itself on the first service call, or to new owners of freezers.

Immediate delivery. Write us for details and discounts.



JEWETT ASSOCIATES
1053 MAIN ST. BUFFALO 8, N. Y.

INTERNATIONAL HARVESTER

Refrigeration

THE INTERNATIONAL HARVESTER SYSTEM OF FOOD PRESERVATION

GOLD SEAL REFRIGERATION, INC.

Announces the New

10 CU. FT. REACH-IN FREEZER

- 4 inches cork insulation
- Heavy Gauge Steel
- Baked White Enamel
- 3 Freezer Shelves
- 1/4 Horse Jack & Heintz Condensing Units
- Heavy Hardware
- Modern Design

GOLD SEAL REFRIGERATION, INC.

4412 Park Ave., New York City LU. 4-3870

More Air Conditioning, Food Coolers Installed In Buffalo Dept. Store

BUFFALO, N. Y.—As part of its \$2,500,000 expansion program, Sattler's department store has enlarged its air conditioning system which now compares in size with some of the country's largest. Sattler's is Buffalo's only air conditioned department store and long has boasted one of the largest air conditioning systems in the state.

The store also has installed a large amount of refrigeration equipment in its expanded food department. The addition of several huge coolers boosts the store's food refrigeration capacity to a total of more than five full carloads.

Separate coolers have been provided for meats, cheeses, milk, butter and green goods, each chilled to the exact scientific level required for the article stored.

Super-Cold Nets \$152,244 On Sales of \$3,309,826

LOS ANGELES—Super-Cold Corp. here has reported a net profit of \$152,244 for the six months ended June 30. Net Sales for this period totaled \$3,309,826.

The board of directors withheld any dividend payments until both bank loans and inventories, are reduced. Inventories increased from \$2,717,331 to \$3,028,741, and bank loans increased from \$1,035,000 to \$1,345,000.

They Can't Call This a 'Dead' Giveaway



Symbolizing the wealth of prizes offered to dealers and salesmen in the sales contest sponsored by Bendix Home Appliances, Inc., and its distributors, Miss Ruth Gray (Miss Northern Ohio Appliances, Inc.) and W. A. Becker, Bendix midwestern sales manager, give away a "million dollars" in contest money at a meeting of Cleveland dealers.

Bendix Dealers Hear Details of Sales Contest

DETROIT—How the \$1,000,000 Bendix automatic washer sales contest, being launched Aug. 1 by Bendix Home Appliances, Inc., will work was explained to approximately 600 Bendix dealers here last week.

Described by A. W. Baker, Bendix regional manager, as the largest sales contest ever staged in the appliance industry, the contest will run until Dec. 13.

It will give dealers and their personnel opportunities to:

1. Earn merchandise prizes by accumulating points given for each washer sale.
2. Win merchandise valued at several hundred dollars from the local distributor, Buhl Sons Co.
3. Participate in monthly national contests sponsored by Bendix for new automobiles "and other appealing merchandise."
4. Win, by an excellent overall performance during the contest period, a five-day trip to New Orleans.

When a dealer's salesman sells a Bendix automatic washer, and that washer is installed, the demonstrator will send the buyer's name and serial number to the distributor.

The distributor will then send the dealer a merchandise certificate unit which is divided into four segments. The first segment is filled in and retained by the dealer. The other three are given to the salesman.

The salesman fills in the "national" segment and gives them to the dealer for mailing to the distributor. He retains the merchandise certificate which is good for 200 points toward any prize listed in the prize catalog.

In addition, Ned A. Gorrell, assistant manager of Buhl Sons' major appliance division, offered another 200 points per sale to salesmen of those dealers who sign agreements permitting assessments on them of \$2 per washer for the duration of the contest.



"ONE STOP SERVICE"

For Your

REFRIGERATION SUPPLIES and PARTS

also Complete Stocks of
Pipe, Valves & Fittings

HAJOCA CORPORATION

Philadelphia, Pa.

Reading, Pa.

Chattanooga, Tenn.



TREASURE MAP

OF INDUSTRY

Washington

TREMENDOUS WATER POWER
LOW ELECTRIC RATES
LEADER IN LUMBER
BASIC METALS AND ORES
LARGE AGRICULTURAL YIELD
SOURCE OF SEA FOOD
GATEWAY TO THE ORIENT
EXCELLENT TRANSPORTATION
FAST GROWING POPULATION
SCENIC WONDERLAND

* One of a series of advertisements based on industrial opportunities in the states served by the Union Pacific Railroad.

WATER POWER is one of Washington's most important industrial advantages. Two of the world's greatest dams, Grand Coulee and Bonneville, make it possible to offer industry unusually low electric power rates.

Lumber, coal, iron, nickel, chrome, aluminum—and other basic metals—are available "on the ground floor" for industrial purposes.

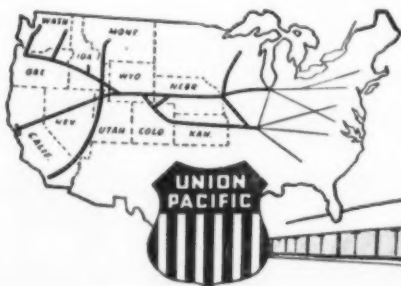
The state's tremendous yield of fruits and vegetables, together with seafood, offers

an immediate supply to concerns engaged in processing and packing.

Washington's population has shown a great growth; providing a large local consumer market and source of industrial workers. The state also is a gateway to the Orient for export business.

From a viewpoint of good living, the Evergreen State offers a year 'round scenic playground . . . excellent educational and cultural advantages.

Excellent rail transportation, for shippers and travelers, is provided by Union Pacific.



* Address Industrial Department, Union Pacific Railroad, Omaha 2, Nebraska, for information regarding industrial sites.

UNION PACIFIC RAILROAD

THE STRATEGIC MIDDLE ROUTE

ROGERS QUALITY LINE of Refrigeration

Frozen Foods Salesman

Every store selling Frozen Foods, from small grocery store to giant superstore, wants one —needs one!

Open top display shows the foods, makes self-service easy, rapid, satisfactory.

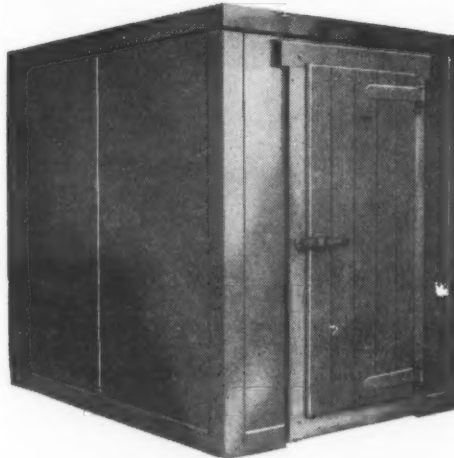
Heavy duty compressor.



Walk-in Cooler

Dealers can invite their customers to "walk in and get one" because they are ready for immediate delivery.

Shiny and attractive in appearance and easy to keep that way. All metal clad inside and out, built for permanence and service.



Dry Beverage Cooler

Best looking on the market. Rapid cooling, high capacity. Lids slide away or lift out. All compartments can be open at the same time.



Rogers refrigeration units are finished in Stainless Steel or polished Aluminum.

DEALERS WANTED

Write, wire or phone today for information on franchise.

Immediate Delivery!

W. ALLEN

ROGERS

Industries

BOX 272-AC

DEMOPOLIS, ALA.



OFF THE CHEST

SHRINKAGE A PROBLEM IN SELF-SERVE CASES?

American Stores Co.
2120 W. Lafayette Ave.
Baltimore, Md.

Editor:

We read with interest the article by C. Dale Mericle on Jack Cinnamon's super market appearing in issue of July 21.

There was one item which was not mentioned in this article, and which we find to be the greatest problem encountered in the sale of pre-packaged meat as a self-service operation. That is the problem of shrinkage, particularly as experienced with smoked or processed meats.

These items, such as hams and tongues particularly, are packaged in heavy wrapping at packing house and, unfortunately, have a high moisture content.

If any of these items lay over from one day to the next, a 15-lb. ham, for instance, may shrink as much as two ounces. Some shrinkage will take place whether it is in an open self-service case or most any type of refrigerated fixture.

However, when these items are weighed and priced and placed on sale in a self-service fixture, any that are not sold at the end of the day have to be removed, reweighed, and re-priced.

Obviously, one answer is to sell everything that is displayed on the first day, but no matter what type of

operation we are considering, there are always going to be some items that lay over until the following day.

Just to make matters more interesting, the Weights & Measures Enforcement Bureau in this city is making a very cooperative, but constant check on the weights of these items and it is their opinion that the problem of shrinkage cannot be effectively overcome unless the packers are willing to reduce the moisture content of their product.

Unfortunately, it is just as much of a legal offense to mark an item purposely under weight with the

anticipation of shrinkage as it is to allow it to be displayed and marked above actual weight which condition arises after shrinkage takes place.

Very truly yours,
W. E. PATTEN

'ONE FOOT IN THE DOOR' FOR EMPLOYE CIRCULATION

Frigid-Freeze Sales Corp.
225 W. 57th St.
New York 19, N. Y.

Gentlemen:—

Will you kindly send us another copy of your book, *One Foot in the Door*.

We recently purchased one copy, and it is such good reading that we require another copy for circulation among our employees.

We would appreciate receiving it as soon as possible.

Our check in the amount of \$3 is enclosed herewith.

FLORENCE SHARAN,
Secretary-Treasurer

ALL ON SALES FORCE WILL READ 'ONE FOOT'

J. H. Greenley & Son
2624 South Saginaw St.
Flint, Mich.

Editor:

We recently received a copy of your book, *"One Foot in the Door"* and want to congratulate you on it.

I have been a subscriber of yours almost since you started publication, and feel it is one of the best—if not the best—trade paper I take. Your down-to-earth editorials have proved to be worthwhile.

I am enclosing an order for 15 copies of the book, *"One Foot in the*

Door," as I wish to give these to each of my sales force.

STUART GREENLEY

'REVERSE' FAN COOLING OLD STUFF IN MONTANA

Ray-Dox Mfg. Co.
Industrial Research Laboratory
Livingston, Mont.

Editor:

We can't see where W. B. Messenburgh of the Fan Department of Westinghouse has anything to "crow" about. We at our laboratory have used reversed cycle cooling for over six years. One 15 in. fan about 3 ft. from opening cools three rooms and removes all fumes.

Fan—Ford V-8 or Model A, mounted on 1/2 to 1/4 hp., 1,740 r.p.m. "Refer" motor.

W. C. HEFFERLIN

For Positive Maintenance of HIGH HUMIDITY...

PEERLESS

FLASH COOLERS!

● Where coolness without dehydration is essential, PEERLESS Flash Coolers give the desired performance. These are the original Flash Coolers, introduced 15 years ago by PEERLESS, and improved to their present high-efficiency in the refrigerating of cut meats, flowers, and all products where high humidity must be maintained. Wide, shallow coils spread under ceilings enable these units to deliver large volumes of cooled air with high relative humidity. Install them in cold storage boxes, walk-in and reach-in refrigerators, for retailers, wholesale houses, packing houses. Better preservation of products by PEERLESS Flash Coolers brings customer satisfaction.

For superior performance specify all these PEERLESS products: Flash Plates, Flash Coolers, Unit Coolers, Ice Cube Makers, Fin Coils, Off Center Coils, Expansion Valves and Capacity Boosters. Write for Details.

● Higher operating back pressure with low flat coils provides higher compressor capacity, a more efficient installation with reduced operating cost.

● Open-louvered drip pan permits free circulation of air through coil surface which produces large volumes of cool tempered air flowing downward by gravity over stored products.

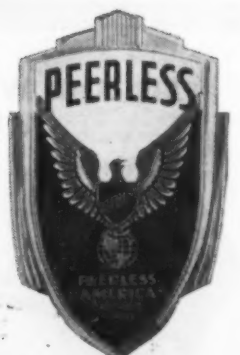
● Refrigerant circuit is continuous copper tube with aluminum fins—non-soldered return bends. No Joints!—No Leaks!

● The famous Peerless Internal Rifling swirls refrigerant over entire interior surface of tubing, insuring a 100% internal wetted surface and in turn 100% coil efficiency.

● A Flash Cooler occupies a space not to exceed 16" from ceiling. A complete unit, it is quickly, easily installed by bolting the convenient hangers to ceiling.

SOLD THROUGH LEADING REFRIGERATION SUPPLY WHOLESALERS

PEERLESS of AMERICA, Inc.



General Sales Offices 2901 Lawrence Ave., Chicago 25, Illinois, U. S. A.

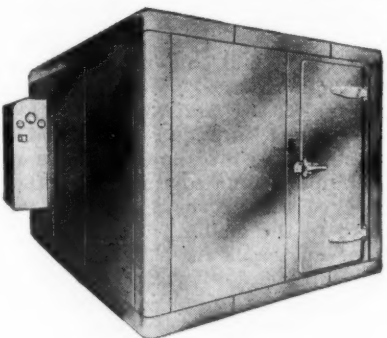
"RECO-FAB"

New Model

ALUMINUM EXTERIOR AND INTERIOR FREEZE COOLERS

FOR ZERO OR MEDIUM TEMPERATURES

● LIGHT IN WEIGHT ● SIMPLE TO ERECT, MOVE OR ENLARGE

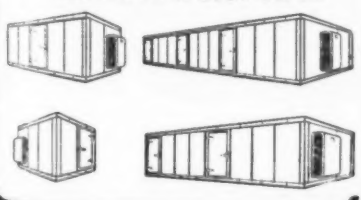


PRECISION MADE! SECTIONAL CONSTRUCTION!

- ★ DAIRY PRODUCTS
- ★ PRODUCE STORAGE
- ★ FROZEN FOOD STORAGE
- ★ MEAT STORAGE
- ★ BLAST FREEZING
- ★ INDUSTRIAL USES

SIZES FOR Every NEED

195 Cu. Ft. to 3360 Cu. Ft.



Available with

SELF-CONTAINED REFRIGERATION SYSTEM EQUIPPED WITH BLOWER COIL AND RECOMATIC DEFROST OR WITH SHARP FREEZING EQUIPMENT.

RECO-PAK

RECO

Cable Address "RECO" Phila.
REFRIGERATION ENGINEERING CORP.
2024 MARKET STREET PHILADELPHIA 3, PA.



IT'S MORE THAN JUST ANOTHER REFRIGERATION PLATE

In thousands of freezer cabinets, frozen food locker plants, sharp freeze shelf stacks and similar equipment all over the country Hubbell-Yoder Refrigeration Plates are doing the job better than it has ever been done before, and at a lower cost. They have established a new and vastly higher standard of operating efficiency and economy for low temperature refrigeration. They have set up a new mark for all other freezing units to shoot at. That briefly, is what the Hubbell-Yoder system of Complete Surface Freezing means when the chips are down. Would you like to know how it can be adapted to your requirements? Write, wire or phone.

THE YODER CO. Refrigeration Division
5500 WALWORTH AVENUE • CLEVELAND 2, OHIO

THE MASTER SERVICE MANUALS — — —

— — — and other books of the Refrigeration Library are depended upon as textbooks in trade schools from coast to coast.

BUSINESS NEWS PUBLISHING CO., DETROIT

THOUGHTS FOR MERCHANDISERS



"Brunner makes a mighty fine unit"

This is the type of sincere compliment you hear in the trade...the direct result of Brunner's years of experience in application...continual advancements in design and construction.

Today, refrigeration condensing units are measured by the standards set by Brunner. Now available are models ranging from 1/4 to 25 horsepower in air or water-cooled types adaptable to just about every domestic, commercial and industrial application.

Present customers are the first to say that anyone concerned in the sale, installation or use of condensing units can ill afford to overlook the advanced features that Brunner can contribute toward dependable, economical, low-maintenance refrigeration.

For your convenience, Brunner direct factory representatives are located throughout the United States. Write us for the nearest address.

BRUNNER MANUFACTURING CO.
Utica 1, New York, U. S. A.

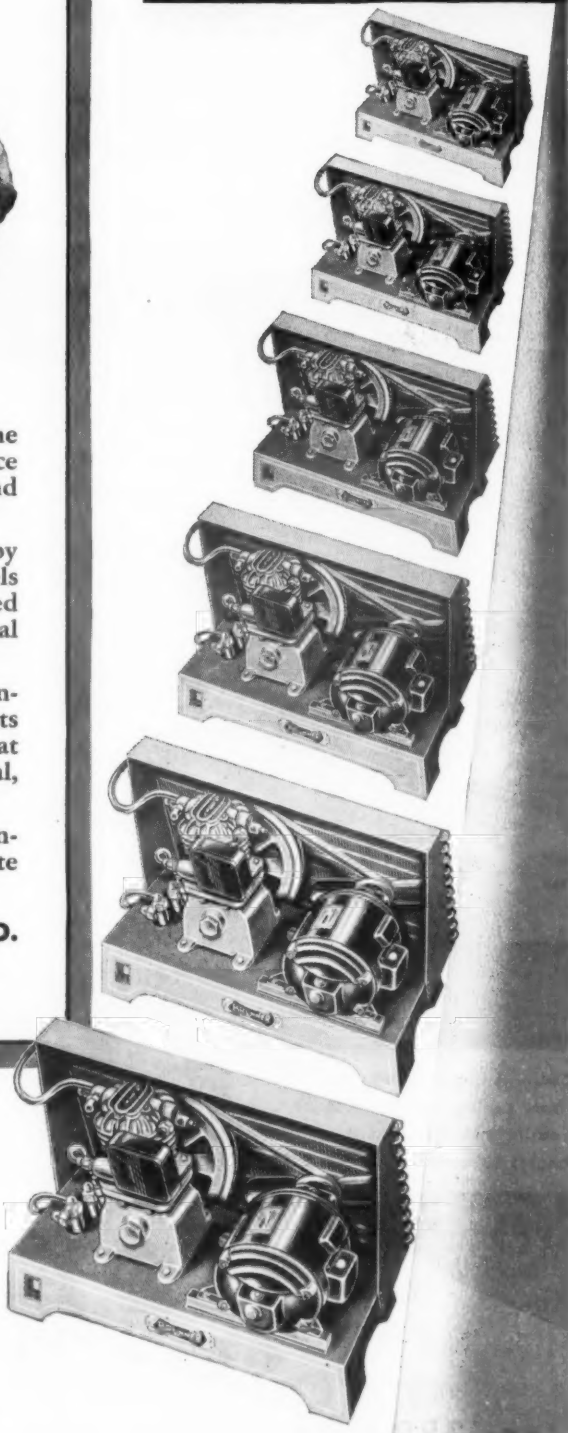
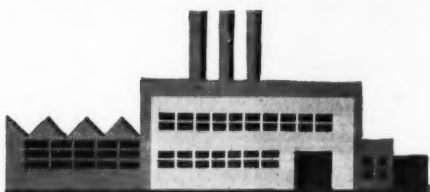
AIR AND WATER COOLED MODELS
1/4 HP. TO 25 HP.

BRUNNER
SINCE 1906

BRUNNER
SINCE 1906

REFRIGERATION

helps you serve better



Schenk, Ward, and Macklem Promoted In Sales Personnel Shifts at Frigidaire

DAYTON, Ohio—Announcement of the promotion of M. C. Schenk, commercial sales manager in the central region of Frigidaire Division of General Motors, Dayton, to manager of national business sales of the company's Commercial Sales Department, was made here today by W. F. Switzer, commercial sales manager.

Succeeding Mr. Schenk is H. H. Ward, air conditioning sales representative in the Commercial Sales Department, who moves up into the position of commercial sales manager for the central region. Announcement of Mr. Ward's promotion was made by H. T. Mattern, central regional manager. Both appointments became effective Aug. 1.

A third appointment was announced by L. W. Curl, branch manager at Birmingham, Ala. Donald R. Macklem, of the sales promotion department in Dayton, has been transferred to the Birmingham branch as commercial sales representative.

Mr. Schenk succeeds R. W. Pocock, who has been promoted to manager of the St. Louis branch of the Frigidaire Sales Corp. Mr. Schenk's experience in the commercial sales field dates back to 1925 when he was employed in the factory's service department. Prior to his appointment as commercial regional sales manager in 1945, he held important managerial positions, including service manager, commercial sales manager, and commercial zone manager in Boston and Cleveland districts and the eastern region.

During the war he served as field service engineer in the machine gun section of the War Products Training Department in Dayton and as resident representative in the negotiation of war contracts for Allison of General Motors.

Mr. Ward became associated with the Frigidaire organization in 1934 when he served as district engineer in Miami, Fla. He was later appointed air conditioning sales manager and commercial sales manager in the Miami and Baltimore-Washington districts, respectively. Prior to his appointment as air conditioning sales representative in the Commercial Sales Department in 1945, Mr. Ward served three and one-half



M. C. Schenk



H. H. Ward

years with the U. S. Navy, completing his tour of active duty as a lieutenant commander.

Mr. Macklem joined the company 16 years ago as a member of the student training program in 1931. A year later he was assigned to the commercial engineering test department and subsequently served in service technical, sales engineering, and war products service training departments. In 1945 he joined the sales promotion department as commercial products specialist.

Ebco Mfg. Sets Up 5-Year Water Cooler Warranty

COLUMBUS, Ohio—A five-year protection plan covering all of its electric water coolers has been announced by the Ebco Manufacturing Co. here.

The plan provides for a warranty covering the Ebco water cooler and accessories for one year after installation and a four-year replacement contract covering the hermetically sealed refrigeration system which succeeds the warranty.

Under the warranty, the company obliges itself to repair or replace any part which its examination discloses to be defective in material or workmanship and which has not been subject to any accident, alteration, abuse, or misuse.

The replacement contract puts the company under the same obligation for the refrigeration system, including the tank and cooling coil. However, the contract specifically excepts from the agreement any part of the cabinet or its finish, the cold control, fan, fittings, relay, or any part of the water cooler other than the hermetically sealed system.

Freight charges from points within the continental limits of the United States are paid by the company under both warranty and contract.

To make the warranty effective, the customer is required to send a post card size installation record to the company immediately. Another such card goes to the distributor and a third to the dealer.

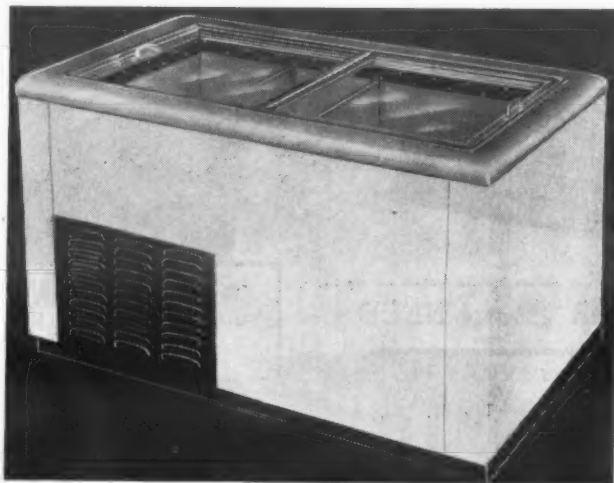
The customer also receives an "Owner's Manual" giving him data on installation, and care of the water cooler.

Ludlow Temperature Control Corp. Covers 8 N.Y. Counties

BINGHAMTON, N. Y.—The Ludlow Temperature Control Corp. has been organized here and will be located at 180 Water St. where a four-story building has been leased. Extensive alterations are being planned to convert the building into showrooms and general offices of the concern.

The company will cover an eight-county Southern Tier sales area. Harold V. Ludlow is president of the company and J. DeWitt Titman is vice president and general manager.

A SMALL BOX—with all THE BIG FEATURES



Short of space? Here's a box especially designed for the "small volume" frozen food retailer. Compact—yet packed with all the features of a large cabinet, this box is short in size, long in quality and construction.

- | | |
|---------------------------|-------------------------|
| 10 CU. FT. SELF CONTAINED | ★ TUBING WRAPPED ON |
| HEAVY GAUGE STEEL | ★ 4 SIDES |
| CONSTRUCTION | ★ WHITE ENAMEL FINISH |
| 2 SLIDING GLASS DOORS | ★ HIGH POLISH STAINLESS |
| 5 INCHES HYDROLINED | ★ TOP |
| INSULATION | ★ MAINTAINS ICE CREAM |
| SAVES EXTRA INSTALLATION | ★ TEMP. |
| COSTS | ★ IMMEDIATE DELIVERY |

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SUPER — COLD
NEW YORK CO., INC.

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L. I. C. NEW YORK

Appliances 'Fall In' According to Size of Unit At Hale Bros. New Store

Helps Customer Save Time

SAN FRANCISCO—To assist the customer spot the merchandise she wants the minute she enters the store, Hale Bros., operator of five department stores, has arranged its new exclusive radio appliance shop here so that small appliances are displayed to the front and large appliances to the rear.

Store manager James Walker has, in addition, set up three model kitchens in the basement of the block long structure. Electric and gas stoves, washing machines, and gas water heaters share below ground space with the kitchens and a stock room.

Hale Bros. new, streamlined and air conditioned one story building, is located on Market St. opposite Grant Ave. Its 18,081 sq. ft. of floor space is divided between a mezzanine, main floor, and basement. It has a 50 ft. frontage and is 170 ft. deep.

Upon entering, customers are first met by a small appliances display on flowing, streamlined fixtures. Immediately behind them are special fixtures for sewing machines and vacuum cleaners.

Opposite these on the right hand side of the store are displayed table model radios adjacent to six soundproof radio demonstration rooms. Console radios and combinations are set up in front of these rooms.

Beyond these are counter record players with earphone hook-up, then eight soundproof record playing rooms.

To the rear are refrigerators, the service shop, cashier's offices, and receiving rooms.

All appliances displayed, it was said, can be operated on the floor by salesmen.

To give maximum harmony and contrast to the white appliances, shades of blue, green, and brown are used in the store decorations.

Hale Bros. also operates five general department stores and one women's specialty shop in northern California.

For Silent Operation and Longer Wear

on REFRIGERATION and
AIR CONDITIONING EQUIPMENT

Use

MANHATTAN V-BELTS
WHIPCORD FHP

They grip without slip.

They flex without overheating.

They are uniformly constructed for longer life.

They deliver the power that makes

your equipment DEPENDABLE.

RAYBESTOS-MANHATTAN, Inc.

"Keep Ahead with Manhattan"

MANHATTAN RUBBER DIVISION, PASSAIC, N.J.

PLAYSAFE

USE
CHICAGO SEALS
and
VALVE PLATES



Precision lapping, superior construction and simple installation make Chicago seals ideal for replacement.

Only Chicago valve plates have replaceable seals.



PERFECT BALANCE

CHICAGO SEAL CO.
50 NORTH WACKER DRIVE • CHICAGO 6, ILL.

Do Customers Complain About Service Charges? This Answer Clicks

LANCASTER, Pa. — Contending that a great many customer complaints about appliance servicing are due more to what a customer expects than to what he doesn't receive, Harry H. Landis, Jr., president of the Landis Electric Co. here, has devised the following enclosure to be sent out with service bills:

"Is the Mechanic the Forgotten Man?"

"Have you ever heard anyone say, 'I won't pay for this service work because it wasn't done right and I haven't received any benefits'?"

"Must a lawyer win a case in order to justify a fee?"

"Must a doctor cure a patient in order to justify a charge?"

"Must an executive be productive every hour to justify his salary?"

"Must a bookkeeper balance her books on the first try to justify her salary?"

"You, as a buyer of goods and services, are paying for unsuccessful as well as successful efforts in most lines of endeavor. Shouldn't a mechanic therefore receive payment for any conscientious effort he makes even if a second try must be made in order to correct the trouble?"

This enclosure really clicks, Mr. Landis declared.

"It seems to us," he said, "that it is up to appliance dealers to educate their customers into not expecting perfection in appliance servicing."

Communal Washer Units Attacked As Unsanitary

WASHINGTON, D. C.—Stringent laws to compel operators of communal washing machines and of "Launderettes" to sterilize their units with live steam or germicides were suggested to the House of Representatives just before adjournment by Rep. Donald L. O'Toole of New York.

Rep. O'Toole pictured the communal units as "glorified septic tanks" that were exposing the millions of families that use them "to every type of known illness."

He said that tests made by a New York laboratory showed the bacterial content inside one machine ran as high as 500,000 per cubic centimeter. A count of 610 was found on the laundry itself. He asserted that it was only a matter of time before these communal washers caused a major epidemic if corrective action was not taken.

Persons in the community washing business and health authorities, however, were reported to have considered Rep. O'Toole's worries unfounded.

One source pointed out that coin-operated washing machines had been used in one Chicago apartment house for 15 years and had never been reported as the cause of an epidemic among users.

Dr. Samuel Front, acting health commissioner of New York City, declared that while germs are not killed in 140° F. water, as used in these washing machines, they "certainly do not thrive" at this temperature.

Hotpoint Launches Campaign To Sell Disposalls for Use In Old Kitchens

CHICAGO—A drive to tap the garbage disposer market offered by the nation's 35 million wall-type sinks, will be launched through dealers' stores for its Disposall, by Hotpoint Inc. in August.

Backed by a key city specialized product newspaper advertising campaign and special store displays, the move is made to widen the market for this appliance which has been sold mainly as an item for new sinks previously.

Asserting that Hotpoint Inc. had long been aware that the kitchen waste disposer was generally identified with modern cabinet type sinks, hence "an item that builders, remodelers, and plumbers were handling," Leonard C. Truesdell, vice president of marketing, said that it is a "natural for department and furniture stores when displayed and sold as a major kitchen aid for old homes not now ready to install the entire sink unit."

Described as the only major kitchen appliance where the best model can be bought for \$125, the disposer is "most wanted" by some 23% of a panel of 200 housewives queried recently by Hotpoint. Another question brought out that most of the group thought a new sink necessary to owning a waste disposer. Upon learning that a new sink was not necessary, 72 indicated that they would ask to see it at an appliance store.

Most disliked phase of other methods of food waste disposal, in the

opinion of most housewives questioned was the necessity for daily trips to outside waste containers. A wanted value in the Disposall was that it eliminated undesirable odors in the kitchen; another important point of appeal was that the garbage disposer offered a positive control over mice, roaches, and other vermin.

According to Mr. Truesdell, "sales resistance to the item was encountered only when the home owner was not fully informed on the operation of the garbage disposer." In illustration, he pointed out that 8% of the women on the panel feared that the unit might place excessive demand on their hot water supply systems. When told that the garbage disposer worked only in conjunction with the cold water tap, this group responded with a request for more information.

Exclusive of new building, current estimates indicate that 2½ million kitchens will be modernized during the next five years. Of these, the Hotpoint study indicated 25% will include garbage disposer installations.

Laredo Firm Adds Pacific Line

LAREDO, Tex.—S. C. May, vice president and general sales manager of the International Plumbing Co. here, has announced appointment of the company as sales representative of the Pacific Mfg. Corp. of Cleveland, manufacturer of packaged air conditioning units for individual rooms. The local company is located at 310 Flores.

See the New C of Carbonation

Hundreds in use in all kinds of establishments for over a year have made the New Model "C" PREST-O-MATIC Carbonator a specialty that can carry you to bigger sales and bigger profits the balance of 1947. Distributors tell us it is the real door-opener to business-getting interviews. They not only sell PREST-O-MATICS. They sell other lines bought by bars, taverns, hotels, clubs, cafes, fountains, drug stores, confectioners.



The New Model C PRESTOMATIC

THIEL'S reputation for PREST-O-MATIC dependability has given Model "C" a warm welcome from distributors of carbonating equipment, and dispensers of soda water, alike. They like the small investment, the thrifty operation, the lack of service, the assurance of instantaneous constant quality, constant pressure, PREST-O-MATIC soda water that makes every drink sparkle.

Bubbles without troubles...



THIEL MANUFACTURING COMPANY
MANUFACTURERS OF
PREST-O-MATIC CARBONATORS
311 BEAUBIEN STREET • RANDOLPH 8417
DETROIT 26, MICHIGAN

BRANCH OFFICE:
44 E. BROADWAY
TUSCON, ARIZ.

To All Distributors
of Carbonating Equipment

August 11, 1947

It's like Thiel to look before we leap.
Long after we were sure in the laboratory that Model "C" PREST-O-MATIC was right, we delayed this announcement.

Many have been use-tested in all kinds of establishments for over a year. You can promise BUBBLES WITHOUT TROUBLES with Model "C" PREST-O-MATIC.

Your only expense in selling PREST-O-MATICS is the time you spend before he puts his name on the dotted line. You waste no valuable time to make the sale stick by servicing.

One sale of a Model "C" PREST-O-MATIC sprouts many. Your customers become your best boosters.

There are important franchise territories still open. Act now before it is too late.

PREST-O-MATIC Profits.

Sincerely yours,
THIEL MANUFACTURING COMPANY



AND THE REEFERS GO ROLLING ALONG

THEY roll with the ease of a ball bearing baby buggy on this new Easload Appliance Truck. For Easload carries the full weight on wheels that are perfectly balanced, that slide back at a touch of the foot pedal after the load is picked up.

Easload Appliance Trucks give you full protection, too. Double strap cincher. Rubber covered uprights. Canvas toe plate. Rubber covered axle nuts.

Sturdy enough for 800 pounds—handy enough to save back muscles—the Easload will speed up your deliveries and save countless hours of hard drudgery

IMMEDIATE DELIVERY

Priced at \$48.50 Order Now... Or
f. o. b. Los Angeles Send For Literature

COLSON EQUIPMENT & SUPPLY CO.
1317 WILLOW STREET LOS ANGELES 13, CALIFORNIA

Refrigeration Research Grants Total \$13,500

BERKELEY, Calif.—Continuation grants totalling \$13,500 for seven refrigeration research projects currently in progress at five colleges and one agricultural experiment station have been approved by the executive committee of the Refrigeration Research Foundation here.

The projects and grants are: Odor removal in refrigerated storage, Cornell university, \$500.

Seasonal variations in rate of transpiration of stored apples, Rhode Island State college, \$1,250.

Heat transfer aspects of refrigerated warehouse packaged goods, Columbia university, \$2,000.

Handling, freezing, and storage of frozen eggs, Ohio State university Research Foundation, \$3,000.

The effect of freezing and refrigerated storage on the quality of pre-cooked foods. I. Meats., Kansas State college, \$3,000.

Carbon dioxide treatment in apple scald and rodent extermination, Rhode Island State college, \$1,500.

Effects of refrigeration on peanuts and peanut products, Georgia Agricultural Experiment Station, \$2,250.

Musselman Corp. Established

SANTA BARBARA, Calif.—Musselman Corp. has been formed in Santa Barbara County, Calif., with 25,000 shares of no par value capital stock, to manufacture appliances and other hardware. Directors are: Alvin J. Musselman, of Santa Barbara, Calif.; Darwin S. Barrett, of North Hollywood; and B. Harry Manlove, of Los Angeles.

A Milestone In Oil Refining



Executives and engineers from Carrier Corp. and Atlantic Refining Co. examine the lower half of a centrifugal casing similar to that which will soon be installed in a new Atlantic refinery. E. T. Murphy, Carrier senior vice president, is at lower left. Next to him are: A. P. Shanklin, Carrier vice president and general sales manager; Dr. Willis H. Carrier, chairman of the board (pointing), and Dr. L. M. Goldsmith, chief engineer at Atlantic.

Using Propane In Centrifugal Compressor Promises Big Savings In Cost and Space

SYRACUSE, N. Y.—A successful run-in test of the first centrifugal compressor ever to use propane in a refrigeration cycle—opening a new field of possibilities for the world's oil refineries—was completed recently by Carrier Corp.

Set up as a self-contained, complete package, including compressor and turbine as well as auxiliary oil pumps and oil coolers, the new centrifugal covers a floor area only 5 ft. wide by 15 ft. long.

The first propane centrifugal, having passed its tests here, will be installed by the Atlantic Refining Co. in its new Point Breeze, Pa. plant by E. B. Badger & Sons Co., Boston contractor. Atlantic will use the machine in its dewaxing process, in which oil is chilled to approximately -25° F. in order to coagulate and remove the wax base.

Dr. L. M. Goldsmith, Chief Engineer for Atlantic, attended the run-in

test. He asserted that Atlantic, in being the first to use the machine, believed that it had a definite place because of its simplicity and greater effectiveness.

H. D. Robie, Project Engineer for E. B. Badger & Sons, said after the test that the Atlantic installation presented no particular problems.

"The saving in cost and space makes centrifugal compression an imperative method in the oil industry," Mr. Robie said. "At a rough rule of thumb guess, I would say that for this job the savings in first costs alone would be around 50% and the saving in floor space at least 66%."

The Atlantic unit, which has been labeled as Carrier's model 18T300, will have five stages. It is nominally a 2,000 c.f.m. compressor and operates between the levels of 21 psia. inlet pressure and -22° F., and discharges into a condenser at 195 p.s.i.a.

IT'S SIMPLE ARITHMETIC...

YOUR ENGINEERS + EMERSON-ELECTRIC ENGINEERS = TWIN-GINEERS*

TWO HEADS* are Better than ONE in designing new Motor-driven Appliances

When Emerson-Electric Engineers work with your Design Engineers, to help improve your present motor-driven appliance, or to create an entirely new one, that's *addition*!

When such collaboration eliminates costly engineering back-tracking and results in money-saving short cuts, that's *subtraction*!

And, when your new product wins immediate success because of its many competitive advantages, resulting from co-design, that's *multiplication*!

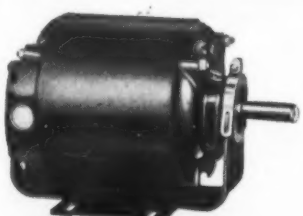
Anyway you look at it, it's simple arithmetic. Two engineering heads

—yours and Emerson-Electric's—are better than one! That's "Twin-gineering."

Although Emerson-Electric is presently booked solid on motor orders, our engineers have never been longer on ideas, experience and skill—and never more willing to share these advantages in suggesting more efficient motor applications for your future improved or new equipment. Your inquiry will be welcomed today!

THE EMERSON ELECTRIC MFG. CO.
St. Louis 21, Mo.

Branches: New York • Chicago • Cincinnati
Detroit • Los Angeles • Davenport



Emerson-Electric Motors
1/20 to 5 H.P.—AC and DC

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MOTORS • FANS APPLIANCES

ENGINEERED to fit..

FORGED FLARE NUTS AND FITTINGS

Prompt Shipment on most items

Electromatic

2100 INDIANA AVE CHICAGO 16 ILLINOIS

Air Conditioning Installed On 2 Passenger Liners For Trans-Pacific Runs

SYRACUSE, N. Y.—Designed for Trans-Pacific service with the fleet of the American President Lines, two passenger steamships under construction at the Bethlehem Shipyard, San Francisco bay, will be air conditioned throughout.

Both of the ships, the *S. S. President Cleveland* and the *S. S. President Wilson*, will be on the San Francisco-Honolulu-Japan-China-Philippines run by early fall.

George Sharp, noted naval architect, has packed every modern device for comfort into the 550 passenger vessels which also have space for better than a half a million cubic feet of paying freight. Each ship will have two swimming pools, sound motion picture theater, massage rooms, barber and beauty shops and gymnasium. There are even temperature-controlled kennels for dogs and other pets.

The heart of the air conditioning system consists of two Carrier two-stage, centrifugal type high sides located in the engine room. Each unit includes an "F-11" compressor, one of which is driven by a 150-hp., 1,750 r.p.m. electric motor and speed increasing gears. The second unit is direct connected to a single-stage, impulse type turbine. Each unit also incorporates sea water condenser and fresh water cooler.

Each unit delivers about 150 tons of refrigeration when chilling water to approximately 43° F. and operating at about 7,000 r.p.m. Refrigeration capacity control is from a direct acting temperature recorder.

Condenser and cooler are of shell and tube design, marine type, with removable heads. Both have steel shells, and non-ferrous tubes and tube sheets. Similar refrigeration units have proven themselves to be highly satisfactory in the marine field for low temperature cargo conditioning applications.

Dining salons, as well as all other public spaces and crew's quarters, are individually zoned and employ standard cooling and heating coils with standard duct connections for ventilation, supply, and re-circulated air.

All staterooms, varying in size from 500 to approximately 2,200 cu. ft., used principally for passengers but, also for officers' quarters and children's playrooms, are equipped with Carrier "Weathermaster" units. Primary (outside) air supply of not less than 25 c.f.m. per person is distributed at relatively high static pressure and high velocity through a conduit system that has welded joints and flanged connections. Primary air is filtered, heated, or cooled in a central station plant, and then circulated throughout quarters.

"Weathermasters" located in each stateroom are fed by these conduits and connected to a water circulating system employing either cold water under summer conditions or hot water under winter conditions. Nozzles induce room air over "Weathermaster" secondary coils, mix room and supply air, and introduce to rooms a supply of conditioned air which ventilates, dehumidifies, and cools or heats to comfortable conditions.

To permit any passenger to regulate conditions to his individual requirements, there is a valve on each secondary coil which can be manually regulated to "cooler" or "warmer" settings by occupants. The valve adjusts the amount of cooling or heating carried out in the secondary coil by altering the g.p.m. circulated. No mechanical equipment, other than these valves, is required in the conditioned area.

Tenants Are Happy, Too

Chicago Title & Trust Uses 750 Tons Of Refrigeration To Cool Building

CHICAGO—Equipment to provide a total of 750 tons of refrigeration is being added to the present air conditioning system in the remodeled Conway building here, soon to be the new home of the Chicago Title & Trust Co.

Satisfaction with year-round air conditioning over a period of years in the old location led Trust company officials to specify complete air conditioning in the remodeling plans for their new offices in the Conway building, according to reports to the Refrigeration Equipment Manufacturers Association.

In addition, tenants previously leasing space in the air conditioned first three floors of the Conway building were reluctant to move without assurance that the upper floors they would move to would also be air conditioned. Arrangements, therefore, were made that floors seven to ten, where the tenants were to move, would have air conditioning this summer and before the rest of the system is completed late this year. The Trust company will occupy the first six floors and the basement.

Filling in the "light court" of the first six floors of the Conway building amounts to constructing a building within a building, but was deemed necessary to provide more floor space and broader areas on each floor for the better organization of offices.

This, nevertheless, posed a problem in ventilation which in turn furnished an additional reason for including air conditioning in the remodeling plans.

A prime reason for installing air conditioning is the fact that past experience of the company has demonstrated the efficiency of office workers and executives alike to be materially increased when temperature and humidity conditions are comfortably controlled all year.

The new offices and air conditioning installation for the first six floors and basement security vaults will be completed near the end of the year, according to present plans.

A chilled water system will be employed and equipment to provide 400 tons of refrigeration will supplement the present Conway building installation bringing total tonnage to 750. Steam turbines and refrigeration equipment are to be located in the basement. Fan rooms will be on the third and seventh floors.

Ductwork will be completely concealed and ceilings will be of acoustical tile. Ceiling heights will be relatively low, ranging from 8 ft. 6 in. to 9 ft. 10 in. However, interior temperatures will not run over 80° F. with 50% relative humidity when outside temperature recordings are 95° F. and more.

Advanced Design Pressure Control Valves Form Efficient Air Handling System for British Aircraft

LONDON, England—Advanced design in pressure-control valves is an outstanding feature of comfort-conditioning plants now being installed in many of Britain's air liners, according to the British journal *Modern Refrigeration*.

"In the Normalair system—developed by Normalair, Ltd., of Yeovil—air is filtered in to the blowers which pass it through silencers and controllable coolers to the spill and non-return valves, where it enters the cabin," the magazine reported recently.

"Before passing to the distribution ducting the air is treated, either

heated or cooled and humidified.

"Issuing into the cabin at a pleasant temperature, the air is kept in motion by a circulatory system which draws the air from the return wall ducts and passes it through the treatment section once more and so back to the cabin. Foul air is extracted from galleys and lavatories and is ducted to the discharge box.

"In this manner the full blower output, up to 2 lbs. per person per minute, is admitted, treated, circulated, and passed out through the discharge valve, which with the master unit is keeping pressure conditions stable and comfortable."

Freon Condensers • Dry-Ex Water Coolers
• Evaporative Condensers • Forced Convection Units • Oil Separators • Liquid Receivers • Heat Exchangers • Pipe Coils • Hi-Peak Water Coolers • Flooded Water Coolers • Ammonia Condensers
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ICE TONGS WERE
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ROGERS SC-500
5 TON CAPACITY
SELF-CONTAINED
AIR CONDITIONING UNIT
Unexcelled for use in
homes, stores and offices. All automatic controls, internal wiring and charge of Freon-12 refrigerant included.



AVAILABLE
IN
3-5-7 1/2-10-15
20 and 25
TON CAPACITY
UNITS

ROGERS SELF-CONTAINED AIR CONDITIONING UNITS

A look into the superior features of ROGERS Conditioners proves you can look forward to performance that fulfills the post-war promise of the industry. Here's a new and vastly higher standard of efficiency in packaged air conditioning . . . units that meet every requirement of architect, engineer and contractor.

That's why hundreds of users of ROGERS Conditioners and men responsible for their installation all agree . . . that for every commercial, industrial and institutional air conditioning application—ROGERS units offer most in ease of installation, appearance, durability and economy of operation.

Easily Transformed to Year Round
Conditioner by Adding Heating Coil and Humidifier



ROGERS SC-1000
10 TON CAPACITY
SELF-CONTAINED
AIR CONDITIONING UNIT
A heavy duty unit for medium size installations. Note narrow width (30") permits easy access through standard doorways without requiring disassembly of unit or removal of door frames. Shipped complete, ready to operate.

ROGERS CONDITIONERS ARE EASILY INSTALLED — SIMPLE TO SERVICE

Interchangeability of access panels, fresh air knock-outs and utility connections on both sides, make for maximum convenience in servicing. Installation is quickly performed and inexpensive:

1. CONNECT TO WATER PIPES.
2. CONNECT TO ELECTRICAL CURRENT.
3. THE UNIT IS READY FOR OPERATION.

LITERATURE AND SPECIFICATIONS for Air Conditioning Units. Write for BULLETIN NSC. For Dehumidification write for BULLETIN NCD.



R. B. ROGERS COMPANIES INC.

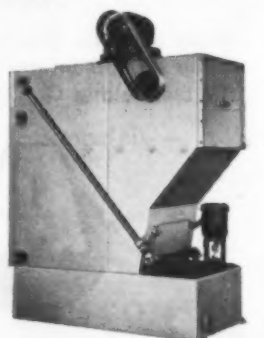
1120 LEGGETT AVE., NEW YORK 59, N. Y.

Manufacturers of Equipment for Air Conditioning, Refrigeration, Heating and Ventilation.

Where there's a Humidity Problem!

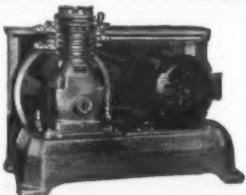
ROGERS SYSTEM OF CHEMICAL DEHUMIDIFICATION WITH TEG

This efficient system is a modern development for the control of humidity in air. Manufactured exclusively by ROGERS, the equipment utilizes triethylene glycol (TEG) as a dehumidifying agent. This system offers the most effective means of controlling moisture in the air for comfort and industrial processing. Gives independent control of humidity and temperature. Another great advantage of (TEG) is its power to destroy air borne bacteria. Thus, in the ROGERS System moisture content of the air is controlled and the air itself sterilized. Easily installed, with completely automatic, simple equipment.



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 - RUGGED CONSTRUCTION
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- GENERAL REFRIGERATION DIVISION
Yates-American Machine Co., Beloit, Wis.

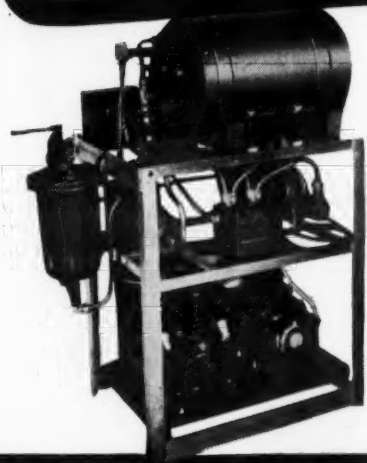
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AUTOMATIC REFRIGERATION

They'll Do It Every Time By Jimmy Hatlo



It's Time To SELL Again!

There's the Right CRYSTAL-FLO For Any Job! Carbonator



Crystal-Flo Carbonators provide the highest quality soda-water at a lower cost. Installation is unusually convenient, operating expenses low, and the unique Crystal-Flo carbonation principle assures the highest efficiency.

Model "R" Refrigerated Carbonator

Compact in size, stainless steel heat transfer and carbonating chambers. The Kluecker method of simultaneously refrigerating and carbonating produces an unusually high carbonation and dispenses drinks at an exceptionally cold temperature. In three sizes—for ordinary and peak capacities.

Only Crystal-Flo Offers All These Advantages

Carbonation:

Water is pumped into stainless steel carbonating tank containing CO₂ gas at 120 lbs. pressure. Water is hydraulically separated into a fine mist which immediately absorbs CO₂ and gives excellent carbonation without a waiting period.

Convenience:

No belts, pulleys, gears or lubrication required. No bearings except in motor. Cleaning of check valve water strainer and maintenance of gas supply only attention required.

Economy:

Water pump runs only when water is being drawn. Cost of gas virtually the only cost.

Crystal-Flo equipment enables distributors to sell the rich soda fountain and tavern market; to increase sales and profits with the finest units available today. Immediate delivery.

Distributors Wanted

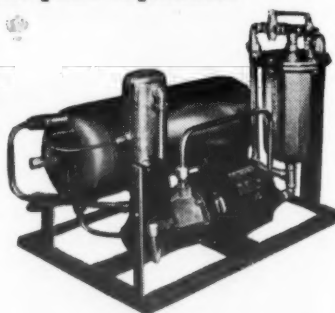
Many desirable distributor territories are still open. Write or wire today for full information on all the profit making advantages of the fast selling Crystal-Flo line.

AMP CORPORATION

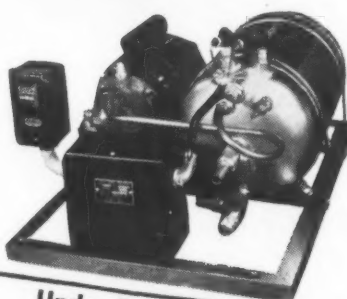
Manufacturers of Crystal-Flo Equipment

2915 Locust Street • St. Louis 3, Missouri

Model H4 Carbonator
Capacity 35 to 50 gals. per hour. Space required 30" x 17" x 20". Carbonating tank can be placed in cooler if desired with motor and pump outside. Water filter optional.



Model LB Carbonator
The greatest value in the field today. Capacity 20 to 25 gals. per hour. Space required 16" x 20" x 12". Single, compact frame without filter. Small, highly efficient, and low and competitive in price.



Under Bar Dispenser



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Are New York and Washington In America?

(Concluded from Page 1)

(1) He believes that the nation's economic curve is headed downward; but

(2) He insists that his own business, and the prospects for his community or local region, are headed upward.

About all we can deduce from this paradox is that too many western, southern, and midwestern business men are taking seriously what they read in those "confidential" dope-sheets published in New York City and Washington. These latter are pessimistic; whereas the facts which individual businessmen in the rest of the country have at hand are decidedly optimistic.

Ever since V-J Day the crystal-ball gazers in New York City and Washington have been predicting an imminent depression. They keep advancing the date—obviously in considerable embarrassment—but they stick to the story.

Awed by the magic aura which seems to surround any "statistician," gossip-columnist, or publisher of the businessman's equivalent to "The Racing Form," the corporate manager living west of the Alleghenies decides he can't believe the evidence he sees at first-hand.

"Sure, farmers are unprecedentedly prosperous (their cash income for the first half of 1947 is 25% greater than the record-shattering first six months of 1946). Sure, more people are gainfully employed now than ever before. Sure, money is circulating at a fantastic rate. Sure, wages are more than double prewar. Sure, my own business looks wonderful.

"But the crystal-ball-gazers in Washington say things are gonna get tough. So, maybe we'd better slow up a bit." That's what he says to himself. In so doing he and thousands like him—misled by charlatan "economists"—are rumoring the nation into a depression.

Summertime is vacation time, and, according to all reports, Americans are traveling this summer as never before. Let's hope that some of the Washington-New York City pessimists are touring western and southwestern regions right now. If so, they may awaken to what's going on in the United States today.

If they motor through West Virginia, for example, they'll see new houses going up, and new business buildings, all along the well-traveled highways. They'll see new paint jobs and redecorating everywhere, and new cars on the road. (John L. Lewis's miners are doing well, thank you.)

Or if they ramble through Indiana, Illinois, Iowa, Missouri, Nebraska, and Kansas, they'll find that farm prosperity means small-town prosperity—and that this midwestern affluence is spreading upward to the major trading areas in that region.

And if the motor tour is a long one, the eastern "economist" might even get down into Texas, or out on the Pacific Coast. If so, he'll be a different man. The farther west he goes, the more his pessimistic outlook is likely to be shaken.

The traveler who explores the real America learns that business is good and that the future is bright. On the whole, he'll find demand high and inventories low. He'll find new firms whose credit position is extended. And he'll find a continually rising demand for the "better things in life" on the part of citizens everywhere.

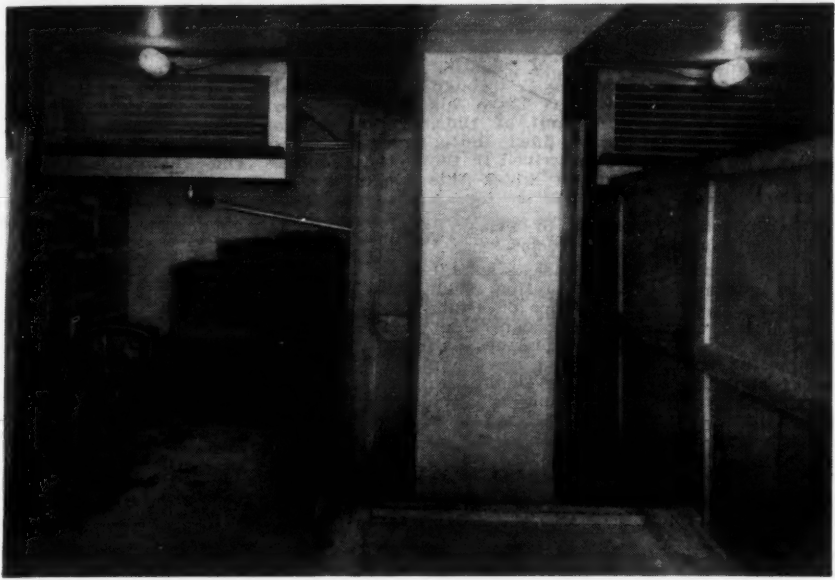
To be sure he'll encounter a pessimist now and then. An automobile dealer may point out, for example, that on his waiting list are many prospects who have ordered three cars when they want only one. On the other hand, the conscientious investigator will find for each of these duplicate orders at least three or four prospective purchasers who haven't ordered but who can be sold.

These smarter people, who refuse to be hurried, constitute the normal market for appliances, motor cars, and "big ticket" specialties. Their mass influence hasn't been felt yet in the "order-backlog" department.

Let's stop taking the Washington-New York City "economists" so seriously. Let's quit giving lip-service to a concept ("the recession") which our own eyes tell us is false. Let's look at our own business, and guide our policy decisions on the evidence before us.

The professional business prophets should See America First.

Roses DON'T Grow Here, Nursery Discovers



Above is a view of the installation of "Recold" water defrost coils in a low temperature walk-in storage room, used by Howard & Smith, well-known West Coast nursery, for storage of frozen rose bushes. Freezing of the bushes is said to retard growth, thereby allowing for longer storage and planting at more advantageous times.

Low Temperature Storage Room Retards Root Action Of Plant Life In Experimental West Coast Installation

MONTEBELLO, Calif.—In an unusual application of commercial refrigeration equipment, Howard & Smith, well-known nursery here, has found the use of water defrost evaporators ideal in helping the nurserymen to develop a method of retarding root action of certain plants through frozen refrigerated storage.

Dealing primarily with roses in their experiments, Howard & Smith have found that by storing the rose plants in a huge low-temperature refrigerator equipped with "Recold" water defrost evaporators and main-

taining constant low temperatures, they can completely arrest root action of the plants through a freezing process.

By storing slips and plants at a low temperature, the flow of sap is stopped and the starch content is equalized, with the result that when the plants or slips are taken out and planted or budded, a more even growth and much faster development is achieved than through natural processes.

To the retail florist or nurseryman who buys his supplies from wholesale firms such as Howard & Smith, the

use of a similar method in his place of business will enable him to keep plants of many hardy varieties, as well as bulbs, for a period of from 90 to 120 days in a completely static condition, it is believed.

Thus stocks may be drawn from the refrigerator as needed, with the assurance that customers will receive better plants and have healthier starts.

Actual tests disclose that plants set out in January in the normal method are somewhat slower than those set out 90 days later, after having been through the refrigeration process described.

In making an actual comparison, it was found that the plants subjected to refrigerated storage will be as large or larger than those set out in the regular way, by July 1.

Another point which is worthy of consideration is that, because the freezing process equalizes the flow of starch through the stem, a more even, regular growth of the plant is maintained. Thus a more uniform garden is possible.

From the wholesaler's standpoint, the method has many advantages. In the case of Howard & Smith, who

handles more than one million roses a year, the problem of distribution and handling all of these within the short time necessary, under natural conditions, made it almost impossible to take care of the requirements of all their local customers as well as their eastern markets.

By the use of the freezing method, they can easily take care of their local trade in the early part of the year, and as eastern markets open they can make shipments as much as three or four months later without detrimental results.

Refrigeration Engineering, Inc., who claims this experiment is another first in "Recold" development, says it marks a very forward step in the future of the nursery business. The Howard & Smith installation was engineered and sold by Bob Fraser of Fraser & Reed Refrigeration Co. of Los Angeles.

Buffalo] Firm Files Name

BUFFALO—A business name has been filed in the Erie County clerk's office for Harry's Refrigeration Service, 376 Taunton St., here, by Harry Okun.

47A BUYER'S GUIDE

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If your merchandising plans include the selling-and-servicing of a complete line of modern freezers that are outstanding in quality and leadership, let's exchange information today. Address Desk 11.

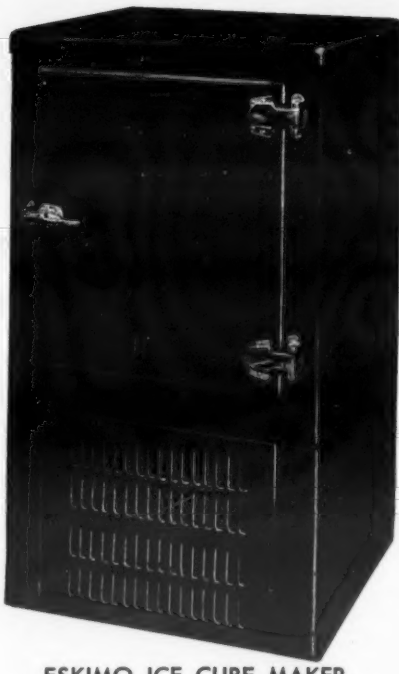
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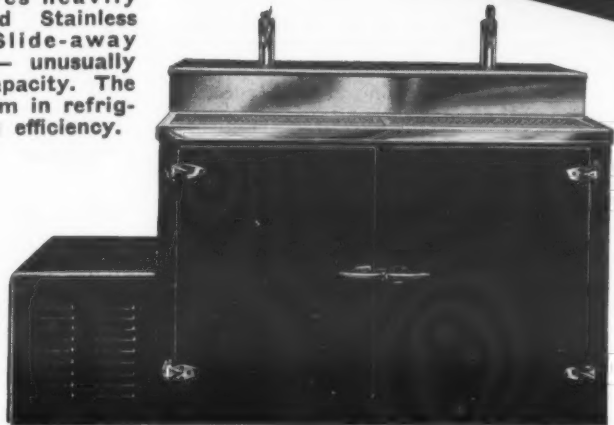
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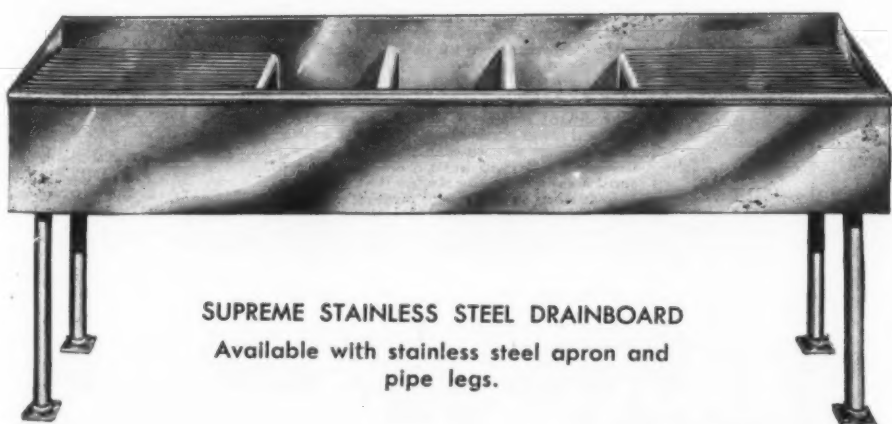
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City of 70,000 Adopts Detailed Ordinance To Regulate Refrigeration Mechanics

HAMMOND, Ind.—Unusual for a city having little more than 70,000 residents is the detailed refrigeration ordinance recently passed here by the City Council.

Under terms of the new ordinance the following provisions are made:

1. An examining and supervising board for refrigeration mechanics is created.
2. The appointive office of city refrigeration inspector is established.
3. All those engaged in refrigeration work are required to be bonded and licensed.
4. All refrigeration mechanics are required to be registered and certified by the city.
5. All refrigeration work (with the exception of that involving self-contained units of less than 1/4 hp.) is subject to a graduated scale of permit fees.

In an effort to standardize the type of refrigeration work performed as well as the requirements for refrigeration mechanics, the new ordinance sets up a system of examinations for both master and journeymen mechanics.

An applicant may qualify for a journeyman refrigeration mechanic's certificate if he has served four years as an apprentice and has passed a city examination. Certification as a master refrigeration mechanic, in turn, is awarded to an applicant who has a minimum of four years' service as an apprentice, three years as a journeyman, and has passed a City examination.

A refrigeration contractor and a journeyman with five years' experience will be named by the mayor and council to the five-man examining and supervising board of refrigeration mechanics. In addition, the city engineer and two members of the council will serve on the board. The contractor and journeyman serve for five years and the other members serve for their respective terms of office.

Another requirement of the new ordinance will be a \$25 annual fee for refrigeration businesses.

Text of the ordinance follows:

Text of Code

BE IT ORDAINED BY THE Common Council of the City of Hammond, Indiana:

Section I. Definitions.

A. Refrigeration as referred to in this Ordinance shall mean the process or act of removing heat from any substance or space in a manner involving the expansion, vaporizing, or liquefying and/or compression of a gas or fluid.

B. Refrigeration equipment as referred to in this Ordinance shall mean any appliance, apparatus, device or assembly of parts, tubes, fittings, tanks and/or machines used to confine, conduct, vaporize, liquefy and/or compress a liquid or gas for the purpose of refrigeration.

C. Refrigeration work as referred to in this Ordinance shall mean the act of constructing, installing, moving, altering, repairing and/or servicing any refrigeration equipment as referred to in this Ordinance. No part of this ordinance shall be construed to prohibit, control or regulate the manufacture, rebuilding, fabricating or assembling of refrigeration

equipment within any plant or on the premises of any manufacturer, rebuilder, fabricator and/or assembler of refrigeration equipment.

D. Refrigeration system as referred to in this Ordinance shall mean all the machines, compressors, devices, equipment, connections, fittings, pipes, tubes, coils and controls containing or used to conduct a liquid or gas refrigerant which in its vaporizing or condensing cycle is used to extract heat for the purpose of cooling any substance, or space whether for the purpose of food preservation, comfort air conditioning, or industrial processing.

E. Business of refrigeration as referred to in this Ordinance shall mean the act of offering for sale, trade or lease any refrigeration equipment, such business establishments subject to licensing and bonding.

Section II. Business of Refrigeration:

Every person, firm or corporation desiring to engage in the business of selling, leasing, constructing, installing, altering, disassembling, assembling, repairing and/or servicing any refrigeration system or equipment as defined in this ordinance in any building, structure, public or private premises or grounds within the City of Hammond shall first file with the City Controller an application to engage in said business, pay a license fee, post the bond, and in certain instances as herein-after prescribed, qualify by examination for a certificate of competency to do certain work.

Section III. Bonds:

Before approval of any such application to engage in said business applicant shall give a good and sufficient surety Bond in the sum of one Thousand (\$1,000.00) Dollars, executed by a recognized Surety Company to be approved by the Board of Commissioners, payable to the City of Hammond and conditioned that said applicant will comply in good faith with all the terms of the Building Code of the City of Hammond, Indiana, of which this becomes a part.

Section IV. License Fee to Engage in Business of Refrigeration:

The license fee to engage in the business of refrigeration within the City of Hammond, Indiana, shall be Twenty-five (\$25.00) Dollars per annum, payable to the City Controller at the time of filing of application. License shall be renewed

upon filing of proper application and payment of Twenty-five (\$25.00) Dollars annually thereafter.

Section V. Revocation of License.

Any holder of license to engage in the business of refrigeration as defined in this ordinance found guilty of violating any part or section thereof through regular process of law may have his license suspended for a limit of time, entirely revoked and/or be fined and/or serve a jail sentence as prescribed in the Hammond Building Code of which this shall be a part.

Section VI. Designation of Place of Business and Vehicles.

Each application for a license to engage in the business of refrigeration shall show street and street number of established place where applicant expects to carry on such business. Applicant shall upon receipt of his license, receive a license number which number along with established and recorded name of firm, corporation or person shall be displayed at such place of business and on all trucks or vehicles used by him, his or their employees in carrying on such work or activities covered by this ordinance. Any person, firm or corporation not having obtained said license and posted said bond within thirty (30) days of date of passage of this ordinance shall, if found guilty in due process of law of violating any of the provisions of this ordinance, be fined in an amount as provided for in the Building Code of Hammond, Indiana.

Section VII. The Examining and Supervising Board of Refrigeration Mechanics.

That there is hereby created a board for the examination of refrigeration mechanics within the City limits of the City of Hammond to be known as the Examining and Supervising Board of Refrigeration Mechanics. Said Board shall consist of five members, consisting of the City Engineer, two members of the Common Council (all of whose terms of service shall continue through their terms of office), one Refrigeration Contractor, and one Refrigerator Journeyman (each of which shall have had at least five years experience in his respective field). These latter two shall be appointed by the Mayor and approved by the Common Council within five (5) days after this Ordinance takes effect, and their service on said Board shall continue for a period of four years.

If any vacancies shall occur on said Board, such vacancies shall be filled by the Mayor and City Council for the unexpired term. Members of said Board shall meet within ten (10) days after the enactment of this Ordinance to elect a President and Secretary whose duties shall be to keep records of all applications, examinations, certificates issuances, renewals and other activities of the Board, and of all fees received and to pay them into the City Treasurer as soon as is practical after receipt of same.

The Examination fee shall be Fifteen (\$15.00) Dollars and said fee shall be paid to the examining board. Said Board shall set up suitable examinations for Master and Journeyman Mechanics Certificate of Competency, shall receive applications, interview applicants and recommend applicants for Inspector of Refrigeration Equipment and Systems for ap-

pointment by Mayor and Common Council approval.

The Board shall and is empowered to revoke the Certificate of Competency of any Master or Journeyman Refrigeration Mechanic or any Certificate of Refrigeration of any Apprentice for cause. The Board shall and is hereby empowered to adopt suitable regulations and set procedure providing for a public hearing upon presentation of written complaints, appeals or petitions from mechanics or the public. The Board shall receive petitions to investigate and recommend to Mayor and Common Council any additions or changes in this ordinance, that may from time to time be necessary to keep same up to date.

Section VIII. The Refrigeration Inspector.

That there is hereby created the office of City Refrigeration Inspector which Inspector shall be appointed by the Mayor and approved by the Common Council in a regular session of the Common Council. Applicants to the office of City Refrigeration Inspector must have no less than seven (7) years of active experience at refrigeration work as defined in this ordinance, not less than two (2) years of which experience shall be in the City of Hammond.

Applicants to this office must file application with the Examining and Supervising Board of Refrigeration Mechanics which Board shall subject applicants to such examination as they see fit and make the recommendation to the Mayor and Common Council. The Inspector shall sever any direct or indirect connections or financial interest in any refrigeration business within sixty (60) days after assuming his duties as Refrigeration Inspector.

Section IX. Duties of City Refrigeration Inspector.

The City Refrigeration Inspector shall have entire supervision over the inspection of all refrigeration work within the City of Hammond, Indiana. The Refrigeration Inspector shall, upon application on the proper forms, grant permits for the installation of refrigeration systems devices and equipment, and upon payment of the required fees he or his assistants shall make inspections of all new refrigeration installations and make re-inspections of any existing refrigeration installations at such times as he may deem necessary for the purpose of safeguarding life and property within the City of Hammond, Indiana.

Section X. Authority.

The Refrigeration Inspector shall have the right to enter any building during reasonable hours in the discharge of his official duties for the purpose of making any inspection or test of any refrigeration work, devices or equipment therein and where such installations are found dangerous to life or property or not in conformity with existing ordinances, he is hereby empowered to disconnect or shut off and seal such equipment or devices after having given notice in writing to the parties concerned.

Section XI. Tests.

No refrigeration work shall be hidden from view in any manner, including pipe covering and flooring nor shall it be enclosed in walls until the Refrigeration Inspector has inspected and passed on same. All piping on systems of more than

(Concluded on next page)

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The Ansul Research Staff
REPORTS ON:

SLUDGES

Approximately 90% of the sludges produced in refrigerating systems are due to moisture. The exact cause can always be determined by analysis, but the appearance of the sludge (see photos) is usually indicative of the cause.

SLUDGE DERIVED FROM MOISTURE —

If water is present in a machine, the nature of the sludge depends upon the type of refrigerant and length of time the water is present. All refrigerants...sulfur dioxide, methyl chloride, Carrene and "Freon-12"...react with water to produce corrosion products characteristic of each. To prevent sludge, the amount of water present in a refrigerating system must be small enough to avoid ice separation and corrosion. For "Freon-12" and methyl chloride, a quantity of water approximately .05% by weight will cause corrosion; the limit is somewhat higher for sulfur dioxide.

SLUDGE DERIVED FROM OILS —

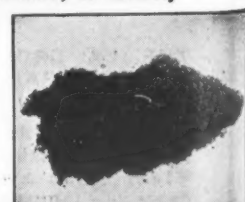
Oil sludges are characterized by total or partial solubility in carbon tetrachloride, gasoline and similar solvents. It is generally presumed that oil sludges are due to two causes: (1) an interaction between the unsaturated constituents of the oil and the refrigerant; (2) a breakdown of the oil due to heat, oxidation, friction, etc.

ANSUL WHOLESALERS are ready and equipped to render an intelligent, co-operative service to refrigeration engineers and maintenance men on problems which arise from time-to-time in the operation of refrigerating systems.

FOR EXAMPLE:

The Ansul Research staff has developed a method for analysis of sludges. This analysis usually gives the answer as to the origin of the sludge. If you have a sludge problem, send a sample of the sludge with pertinent information to the Ansul Research Laboratory through your Ansul wholesaler. An analysis report will be made for you without charge.

Ansul Refrigerants are available at leading wholesalers everywhere.



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... due to moisture



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... due to oil



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REFRIGERATION DIVISION, MARINETTE, WISCONSIN
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Code Requires Fees, Bonds, Inspections

(Concluded from preceding page)

5 pounds of refrigerant charge by weight must be subjected to a pressure test using dry carbon dioxide or nitrogen under a pressure 100% above normal working pressure or not to exceed manufacturers' specifications. This test must be on the piping with a suitable gauge mounted when the Inspector is called for inspection.

Large systems, using long and complicated runs of piping and tubing may be inspected in sections, however, the same pressure test as herein described shall be put to each part of the system after which a final pressure test shall be put to the system as a whole. A final inspection shall be made when unit is operating before final approval is given.

Section XII. Permits For Refrigeration Work Required.

No refrigeration work as defined in this ordinance shall be done or caused to be done by any person, firm or corporation nor shall any person alter, move or change any system where alterations changes or replacements are made of compressors, condensers, evaporators, or refrigerant connections other than motors, controls or fixtures, without first having filed for in the manner hereinafter prescribed and obtained a permit from the Refrigeration Inspector and having paid the fee as hereinafter provided for.

Work of any emergency nature may proceed up to the point where safety to life or property is no longer a factor; however, no work may be covered up or hidden from view until proper permits, inspection and approval has been granted by the Inspector.

Permits to do any refrigeration work as defined in this ordinance shall be granted only to persons holding a Master Refrigeration Mechanics Certificate of Competency then in force. Such permit shall show license number of business causing work to be done, name and certificate number of Master Refrigeration Mechanic in charge of or doing the work, street name and number of place where work is to be performed, size of job in rated tons of refrigeration and cost of such permit. Such permit shall be kept at the location of where the work is to be performed. Failure to present permit at the site of job upon demand by the Refrigeration Inspector shall be a violation of this ordinance.

Section XIII. Permit Fees.

All refrigeration work as herein described shall be subject to a permit fee as follows: Up to and including 1 ton capacity, \$1; over 1 ton up to and including 5 tons capacity, 50 cents each additional; over 5 tons up to and including 10 tons capacity, 25 cents each additional; over 10 tons, one cent each additional. No permit fees or inspection is required for self-contained units of less than 1/4 ton or hp. capacity. However, on request of owner, lessee, tenant or Health officer such inspection shall be made for a \$1 fee.

Section XIV. The Master Refrigeration Mechanic.

Any person having served four (4) years as an Apprentice Refrigeration Mechanic plus three years as Journeyman Refrigeration Mechanic in a manner as prescribed in this ordinance and having applied for the examination; passed same with a grade of no less than 75% correct, and having paid the \$5 fee is entitled to hold a Master Refrigeration Mechanic's Certificate of Competency provided he pay the renewal fee of \$5 annually.

Such Certificate of Competency shall entitle holder to present himself to the public as one certified by the City of Hammond to be skilled in the planning, superintending and the practical installation, servicing and repairing of refrigeration systems as defined in this ordinance, provided he has or his employing firm or corporation has paid the annual license fee and has furnished such bond as heretofore described. Such person, holder of a Master Refrigeration Mechanic's Certificate of Competency, shall be reasonable for all work for which permits have been granted bearing his certificate number. He may personally engage in refrigeration work and/or hire out to others to do such work.

Section XV. Relation Between Licensees and Master Refrigeration Mechanic.

Licensed and bonded persons, firms or corporations having in their employ or having as one member a holder of valid Master Refrigeration Mechanic's Certificate shall enter the name of holder of such certificate and his certificate number on all refrigeration work permits applied for. Where a holder of such certificate severs connection with part or parties licensed and bonded said Holder of certificate shall not engage in business on his own until he has obtained proper license and posted the bond. Persons, firms or corporations shall not engage in refrigeration work without having in their employ or as one of their officers or members a holder of a Master Refrigeration Mechanic's Certificate of Competency.

Section XVI. Persons Now Engaged in Refrigeration Work.

Persons now actively engaged in refrigeration work and desiring to qualify for a Master Refrigeration Mechanic's Certificate of Competency shall within thirty (30) days of the date of the passage of this ordinance file application with the aforesaid City Examining and Supervising Board of Refrigeration Mechanics stating thereon their qualifications and experiences. A majority affirmative vote of said Board on such application shall entitle applicant to Master Refrigeration Certificate of Competency provided the fee of \$5 is paid with his application. After thirty days of date of passage of this ordinance all persons desiring to qualify for a Master Refrigeration Mechanic's Certificate of Competency shall be subject to examinations as heretofore provided.

Section XVII. Journeyman Refrigeration Mechanics' Certificate of Competency.

No person or persons shall hereafter engage in the occupation of or do any refrigeration work as defined in this ordinance as a Journeyman Refrigeration Mechanic inside the city limits of the City of Hammond without first having secured a Master Refrigeration Mechanic's Certificate from the Examining and Supervising Board of Refrigeration Me-

chanics. Exception: Qualified welders shall be allowed to weld the joints of refrigeration systems of ten ton capacity and larger when under the direct supervision of a Certified Refrigeration Mechanic.

Section XVIII. Persons Now Engaged in Work As Journeymen.

Persons now actively engaged in refrigeration work and desiring to qualify for a Journeyman's Certificate of Competency shall within thirty (30) days of the date of the passage of this ordinance file application with the City Examining and Supervising Board of Refrigeration Mechanics stating thereon their qualifications and experiences. A majority affirmative vote of said Board on such application shall entitle applicant to a Journeyman Refrigeration Mechanic's Certificate of Competency provided the fee of \$3 is paid with the application.

After thirty (30) days of date of enactment of this ordinance applicants shall be subjected to an examination in the practical and theoretical aspects of refrigeration, installation and servicing as defined in this ordinance. A grade of seventy-five (75) per cent or better shall entitle applicant to a Certificate of Competency.

Section XIX. Identification of Journeyman.

Journeyman Refrigeration Mechanics

shall be issued a Certificate of Competency and a metal button or card bearing their license number which number must be displayed or carried on their person whenever and wherever any work as covered by this ordinance is performed.

Section XX. Journeyman Refrigeration Mechanics.

Journeyman Refrigeration Mechanics as defined herein, shall not contract, advertise or do any work on any refrigeration equipment as defined in this ordinance unless in the employ of or under the supervision of a Bonded Licensed Master Refrigeration Mechanic. After thirty (30) days of date of acceptance no application for a Certificate of Competency as Journeyman Refrigeration Mechanic shall be accepted from applicants not having served four (4) years as an Apprentice Refrigeration Mechanic, or not having met the minimum school requirements as set up by the Examining and Supervising Board.

Failure to renew said Certificate within thirty (30) days of date of expiration shall cancel Journeyman's Certificate of Competency and require said Journeyman to pass another examination to qualify for another Certificate of Competency.

Section XXI. Apprentice Refrigeration Mechanic.

No person shall hereafter engage in the occupation of or work as an Apprentice on the construction, installation, alteration, repair or servicing of refrigeration systems or equipment as defined in this ordinance anywhere in the City of Ham-

mond without having first secured from the Examining and Supervising Board of Refrigeration Mechanics a Certificate of Registration as an Apprentice Refrigeration Mechanic.

At the expiration of four (4) years of service on such work as the Board shall designate in addition to a minimum of hours of instruction as outlined by the Board, the Apprentice shall be eligible to apply for a Journeyman Refrigeration Mechanic's Certificate of Competency. All Apprentices shall be registered in Compliance with State and Federal Apprenticeship requirements. The Apprentice Refrigeration Mechanic shall work only under the direct supervision of a certified Journeyman Refrigeration Mechanic or a certified Journeyman Refrigeration Mechanic as set forth in this ordinance.

Section XXII. Ratio of Apprentice.

Each licensed and bonded firm or Master Refrigeration Mechanic may have one Registered Apprentice in their or his employ and one additional for every two licensed Master or Journeymen employed.

Section XXIII. Helpers and Laborers.

Helpers and laborers as defined in this ordinance shall not construct, install, alter, repair, or service any refrigeration system or equipment but under the supervision of a bonded master or licensed Journeyman Refrigeration Mechanic may assist in placing equipment, cut holes in concrete, drive trucks, or any other work not directly constructing, installing, altering, repairing, or servicing refrigeration systems or equipment. Any helper desir-

ing to learn the trade shall apply as an Apprentice to the Board which Board shall evaluate his past experience in terms of Apprenticeship and if accepted by said Board shall abide by their directions as to his school and practical experience. In no case shall more than two years' credit be given.

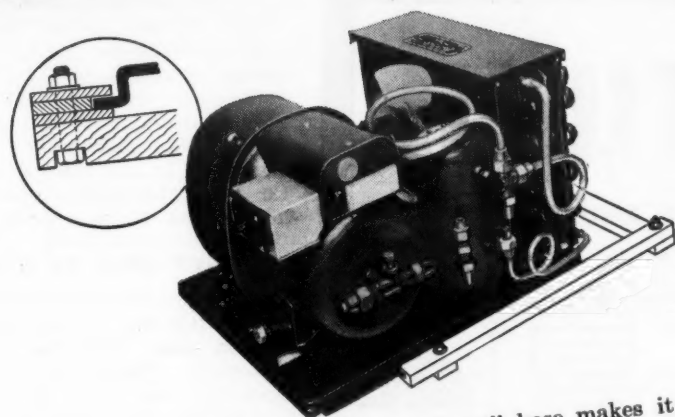
Section XXIV. Special Clause For War Veterans.

All Veterans of World War II having been in the Armed Forces or any branch of the government Armed Forces and who were actively engaged at Refrigeration work as defined in this ordinance prior to their joining or while in the Armed Forces shall not be subject to acquire their Certificate of Competency until a period of thirty (30) days after their release from the service. Such persons as above described shall file a record of their employment and activities relating to refrigeration work while in civilian life and while in the Armed Forces along with their application which experience shall total not less than four (4) years for a Journeyman's Certificate of Competency or seven (7) years' experience for a Master Certificate of Competency. Applicants having less than four (4) years' experience shall be given credit on their apprenticeship.

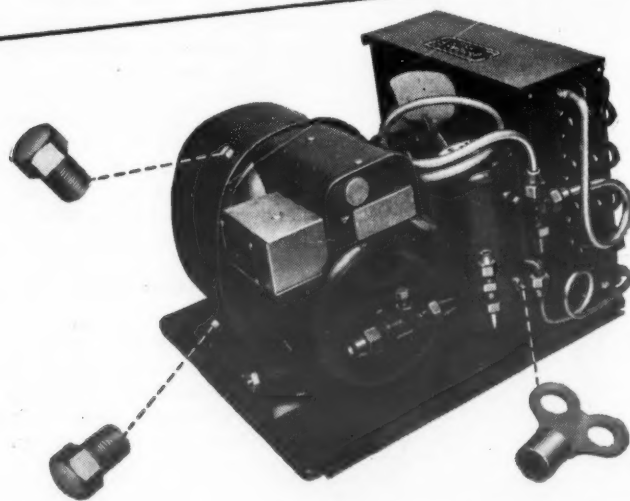
Section XXV.

This ordinance shall be in full force and effect immediately after its passage and adoption, signed by the President of the Common Council, approved by the Mayor, and its publication according to law.

See how simple it is to install, check and adjust a SUPERMETIC



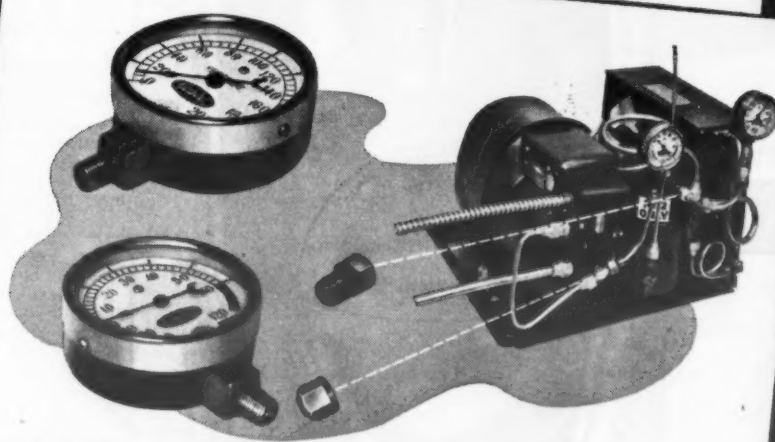
Specially constructed die-formed "pull-out" base makes it easy to install and service a Servel Supermetic. Just fashion a simple channel from spot-welded steel straps and bolt to the fixture. Perfect alignment of "pull-out" rail permits unit to slide easily through fixture channel. No sub-bases are needed.



To check charge, simply open liquid level test cock on receiver with valve stem key. If vapor escapes, add more Freon-12. To check oil level, just remove two conveniently located oil plugs.



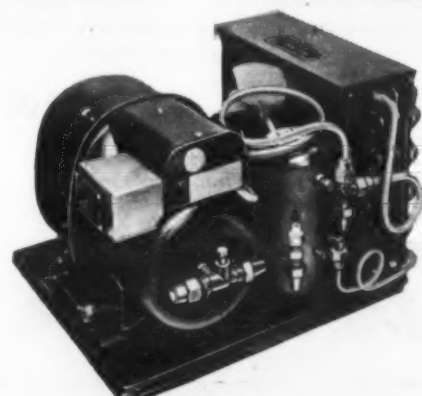
To determine adjustments necessary for proper performance of a Supermetic condensing unit, attach Servel analyzer test set to three terminals in the electrical accessories control mechanism. Analyzer immediately spots low voltage, defective wiring, poor connections or electrical accessory failure.



To check head pressure, screw gauge in spud gauge connection of liquid receiver. Suction pressure is quickly obtained by connecting gauge to suction shut-off valve.

Servel's new "Supermetic" condensing units serve dealers and fixture manufacturers in every vital field...

- | | |
|---------------------|---------------------------|
| 1. STORE FIXTURES | 6. ROOM COOLERS |
| 2. MILK COOLERS | 7. FARM FREEZERS |
| 3. HOME LOCKERS | 8. WATER COOLERS |
| 4. BEVERAGE COOLERS | 9. INDUSTRIAL COOLING |
| 5. VENDING MACHINES | 10. VEHICLE REFRIGERATION |



THESE time- and effort-saving "super-features" of Servel Supermetic condensing units will save your installation and service department many valuable hours. They'll lower your costs, boost your profits.

Learn about the many other advantages of these scientifically designed condensing units. Write for your free copy of a new folder, "Servel Supermetic." Servel, Inc., Electric Refrigeration Div., Evansville 20, Ind.

Servel SUPERMETIC

LATEST
FALL AND WINTER
**Catalog
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Reserved exclusively for the whole-sale trade. Please include proper identification with your request.



CHASE refrigeration supply co. NOT INC.
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Chicago's Oldest Refrigeration & Air Conditioning Supply House

FASHIONED FOR FUNCTIONING

Even the handsome, engineered good looks of Larkin refrigeration products contribute to their fine performance. The originator of the Cross Fin Coil also offers you matchless quality in Air Conditioning Units—Evaporative Condensers—Instantaneous Water Coolers—Humi-Temp Forced Convection Units—Bare Tube and Zinc Fused Steel Plate Coils—and complete equipment for commercial and industrial refrigeration.



LARKIN COILS 519 MEMORIAL DRIVE • S.E. ATLANTA • GEORGIA

Refrigeration Problems And Their Solution

By P. B. Reed

For Service and Installation Engineers



Manager, Refrigeration and Air Conditioning Division, Perfex Corp.

Making Money In a Service Business (6)

A Budget is a Fiscal Plan; a dollars-and-cents map on which you chart your business course. A budget for a service business must include not only estimated expenses and expenditures for the period to which it applies, but it must also include an estimate of income for that period,—how much business you expect to do. Consequently, it will show an estimate of the profit that will be made during the period.

A BUDGET PLANS FUTURE BUSINESS

But it is much more than merely a money estimate. It is a plan which is woven into and through your business policy. The type of work you do, what kind of equipment you handle, the size of your organization, your location,—everything in fact that pertains to the operation of your business will affect your budget and will be affected by the budget.

Making up your budget is one of the most important things that you will do for the next six months or year. It is important:

- That you make up a budget.
- That you make it as complete as possible.
- That you stick to it and be guided by it.

A BUDGET IS A 'MUST'

The management of a successful business of any size, would think no more of trying to run that business without a budget than they would of not keeping records. In large organizations every department has to have its own Budget and it has to operate according to that budget.

Some departments such as an Advertising Department, have merely Expense Budgets, for they do not have any separate income, but the Expense Budget specifies and limits their expenditures. Some large departments, such as a Service Department, may have Profit-and-Loss Budgets, with Net Sales, Direct Costs, Gross Profits, Overhead and Net Profit or Net Loss, just as if these departments were separate businesses.

BUDGET MUST BE ITEMIZED

To be of any value a budget cannot be an overall estimate. It must be built up, piece-by-piece and month-by-month just as business is built up. It must be itemized, separated and broken down as much as possible. This makes for greater accuracy in estimating and allows for more intelligent analysis of the details and of the overall picture.

BUDGET MUST BE FOLLOWED

After the budget has been carefully built with due consideration to all factors and conditions, it must be followed. There is no sense in spending the time and trouble to work out the plan and then not follow it. And if you "fudge" or "chisel" on your plan, you are not fooling anyone but yourself. It is you that is hurt.

If you have never operated on a budget, you will probably find that you will miss your estimates rather badly for the first one or two budgets; but don't give up. Keep at it. Revise your budget if you have to, but stay with it.

When it comes time to build another budget you will find that you will be able to estimate more accurately. Finally, you will be surprised to find how closely you have been able to estimate your future and to live up to that estimate.

THE FISCAL YEAR

The basis of a budget is one year, your Fiscal Year. Your Fiscal Year is your Business Year and it does not necessarily have to be the same as the Calendar Year. The Calendar Year starts Jan. 1 and ends Dec. 31. You can start your Fiscal Year any time you choose. It depends to some extent on your location.

You may find that you do approximately one-half of your yearly business from Nov. 1 to April 31 and one-half from May 1 to October. Thus by starting your fiscal year on Nov. 1 instead of Jan. 1, you have two half-years that are about equal in sales and costs instead of a heavy business and big profit for one half-year, and low business volume and a loss for the other half-year. This helps in building the budget.

In some locations Jan. 1 and July 1 may divide the volume better so the Calendar Year would be the best

Fiscal Year. The federal income tax law allows you to report your income on the basis of your fiscal year, instead of the calendar year, if the two do not coincide.

THE MONTHLY BUDGET

For the first six months of the year, you will budget on a monthly basis, that is, each month will have its separate budget, itemized in considerable detail. For the last half-year you may find that you do not need to break down your budget into monthly budgets that far in advance. At mid-year (at the end of the first six month period) you will break down the second half into monthly budgets.

Moreover you may find that the actual income, expenditures and profit for the first six months were quite a little off from your budget for that period. If you find this true at mid-year, you will substitute the actual for the Budget for the first six months and make it a part of the total yearly Budget. This will mean revising your Yearly Budget at mid-year in the light of the actual of the first half.

SEVEN PARTS OF THE BUDGET

The Budget consists of seven principal parts: Net Sales, Direct Costs, (Continued on next page)

TABLE 2—Budget of Operating Expenses or Overhead May, 1947

Salaries	
General Manager	\$ 600.00
Service Manager	400.00
Shop Foreman	350.00
Dispatchers (4 to receive and dispatch)	720.00
Stockmen (3)	580.00
Truck Driver	190.00
Stenographer	175.00
Clerks (3)	420.00
Janitor-Porter	140.00
Total	\$3,575.00
Auto and Truck Expense	
Gasoline	\$ 50.00
Oil	8.00
Repairs	7.00
Miscellaneous (Greasing, Washing, etc.)	20.00
Depreciation	50.00
Insurance	10.00
Total	\$145.00
Rent	\$ 350.00
Taxes (State and Local on Equipment and Inventory)	75.00
Electricity	50.00
Gas	38.00
Telephone and Telegraph	125.00
Office Supplies	40.00
Postage	27.00
Freight and Express	125.00
Advertising (Phone Book, Newspaper, and Direct Mail)	200.00
*Insurance	110.00
Association Dues and Periodicals	50.00
*Maintenance of Equipment. Miscellaneous, Unclassified Expenses	50.00
Reserves	
Depreciation	\$200.00
Inventory	175.00
Bad Debt	100.00
Total	475.00
Total Overhead for May	\$5,485.00

*Exclusive of Auto and Truck.

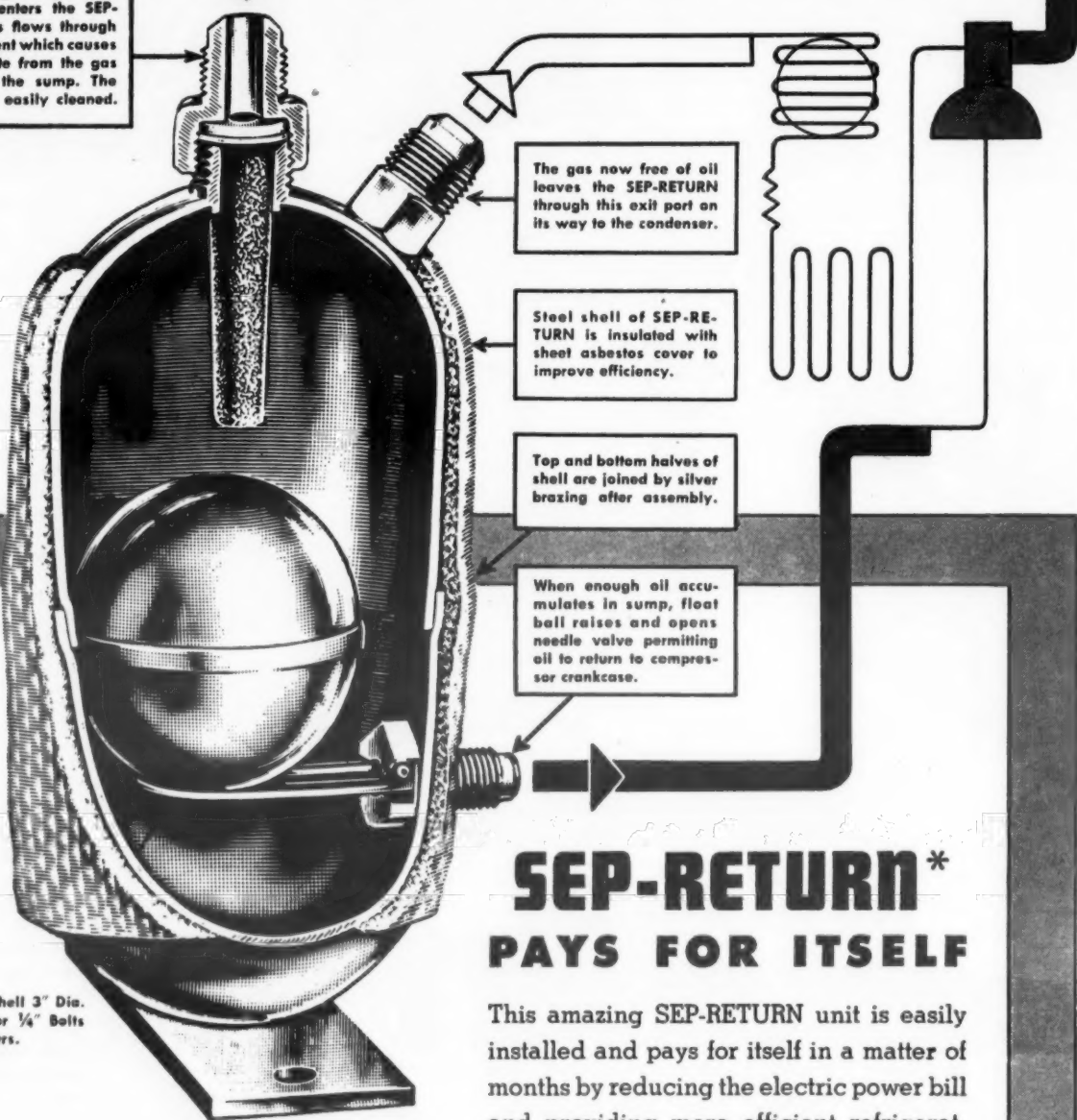
Note: Auto and truck expense covers only one truck and a coupe for the Service Manager. Servicemen furnish their own cars for which they are paid at the rate of 6 cents per mile.

LOWEST PRICE ON THE MARKET

SEP-RETURN

AUTOMATIC OIL SEPARATOR AND RETURN

Oil-laden hot refrigerant gas from the compressor enters the SEP-RETURN. The gas flows through the Porence element which causes the oil to separate from the gas and trickle into the sump. The filter-separator is easily cleaned.



SEP-RETURN* PAYS FOR ITSELF

This amazing SEP-RETURN unit is easily installed and pays for itself in a matter of months by reducing the electric power bill and providing more efficient refrigerating. On new jobs the SEP-RETURN makes it possible to use smaller compressors.

IT SAVES MONEY—IT MAKES FRIENDS

Inlet and Outlet 3/8" SAE. Oil Return 1/4" SAE. For Use on Systems Up to one-third H.P.

No. 400 List Price **\$8⁰⁰**

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CHICAGO 16, ILL.

Fine PRODUCTS DESIGN-ENGINEERED FOR RUGGED SERVICE

RAPID Refillable DEHYDRATORS

... really dehydrate because balanced dimensions provide maximum dispersion area, thorough contact with silica gel. Sturdy, one-piece, leak-proof shell, triple sealed, truly non-collapsible. Removable, large area, finger type screens permit complete cleaning, prevent damage.

YOUR WHOLESALE has Rapid Dehydrators in eight practical sizes: 5 to 200 cu. in.



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TABLE 1—Profit and Loss Budget for May, 1947

	Net Sales	Direct Costs	Gross Profit Amount	%
Domestic Installation				
Material	\$ 140	\$ 85	\$ 55	
Labor	540	360	180	
Total	680	445	235	34.6
Domestic Service				
Material	3,150	1,750	1,400	
Labor	3,675	2,450	1,225	
Total	6,825	4,200	2,625	38.5
Commercial Installation				
Material	1,110	610	500	
Labor	1,860	1,240	620	
Total	2,970	1,850	1,120	37.8
Commercial Service				
Material	5,430	2,950	2,480	
Labor	4,725	3,150	1,575	
Total	10,155	6,100	4,055	40.0
Air Conditioning Installation				
Material	890	490	400	
Labor	780	520	260	
Total	1,670	1,010	660	39.5
Air Conditioning Service				
Material	2,000	1,100	900	
Labor	2,700	1,800	900	
Total	4,700	2,900	1,800	38.4
Shop Repair				
Material (Including Misc. Supplies)	1,290	580	710	
Labor	1,710	1,140	570	
Total	3,000	1,720	1,280	42.7
Grand Totals	\$30,000	\$18,225	\$11,775	39.3
Net Sales	\$30,000		\$280,000	
Direct Costs	18,225		178,080	
Gross Profit	11,775		101,920	
Percent, Gross Profit	39.3%		36.4%	
Overhead	5,485		77,560	
Percent Overhead	18.3%		27.7%	
Profit Before Income Tax	6,290		24,360	
Percent Profit Before Income Tax	21%		8.7%	
Federal Income Taxes	1,443		5,590	
Net Profit After Taxes	4,847		18,770	
Percent of Net Profit After Taxes	16.2%		6.7%	

Table 1—A P and L Budget for a sizable Refrigeration Service and Installation Company, who does not merchandise other than installation and service parts, supplies, and replacement machines and coils. See Table 2 for itemization of Overhead.

Parts of Budget--

(Continued from preceding page)

Gross Profit, Overhead, Profit Before Taxes, Taxes and Net Profit After Taxes, just the same as a Profit and Loss Statement. In fact, a Budget is merely a P and L Statement beforehand; a pre-estimated Statement.

Net Sales include total net billings to all customers for all material and services and should be broken down to show separately the various departments or sources of revenue. Direct Costs include direct labor, material, sub-contracts, mileage and other expenditures that can be directly allocated and charged to a particular installation, service call or, in some instances, to a group of jobs in the same class.

The Gross Profit is the difference between Net Sales and Direct Costs. Overhead includes all those expenses that go on even with little or no business; costs that cannot be allocated or charged to one job or class.

Profit Before Taxes is what is left after Overhead is taken out of Gross Profit. Income Taxes are taken out of Profit Before Taxes leaving Net Profit After Taxes. They are the Real Profit.

SAMPLE P AND L BUDGET

Table 1 shows a typical budget that illustrates how the various departments or types of business are separated so that their activities can be studied and compared. In this way you can determine which phases of your business are your best money makers; which are low volume activities or make low profit,—and why. Separating the activities shows up weaknesses to be corrected and reveals where more supervision, planning or "push" are needed.

Table 1 is based on an investment of \$25,000 in equipment and \$40,000 in merchandise in stock. This amount of business will require about 35 service and installation men and

16 persons in indirect labor,—administrative, supervisory, stockroom, office, truckdriver, etc. Total direct labor for May was billed at \$15,990 at a cost of \$10,660 and a gross profit of \$5,330 or 33.3%. Material was billed during May at \$14,010, cost \$7,565 gross profit \$445 or 46%.

COMPARING BUDGET FIGURES WITH ACTUAL

One of these profit and loss budgets can be made up for each of the first six months of the year, one as a summary of the first six month period, one as an estimate of the second one-half of the year without breaking it down into months, and one as a summary of the entire year. This same form may be used for the Monthly Statement of Actual Net Sales, Actual Direct Costs, Actual Gross Profit, Actual Overhead and Actual Net Profit; also for the semi-annual and annual statements. In this way the budget can be compared with the actual operating statements to determine:

1. Whether the budget itself was not well estimated, or
2. In what way Direct Costs and Overhead were not controlled to stay within the budget figures.

For the Monthly Statement, the figures for Net Sales, Direct Costs and Gross Profit for each of the classifications of the business can be taken from the totals of all of the "costed-out" file copies of the Service Work Orders and Shop Repair Orders for the period, separated according to the type of installation or service covered by that Work Order.

WORK ORDER IS FOUNDATION

The importance of the Service Work Order and Shop Repair Order in the system is, therefore, apparent; also the necessity of "costing-out" each one so that the totals of Net Sales, Direct Costs (broken down into Labor), Material, Mileage, Sub-Contracts, Fees, etc.) and Gross Profit for each work Order will be

available not only for individual study but also that those of the same classification of business can be added together to furnish sub-totals shown in the Monthly Operating Statement.

For the Budget, the Direct Costs are estimated on a basis of what percentage Direct Costs have been running to Net Sales for a recent comparable period, and taking into consideration any likely increases or decreases in labor, material or other factors entering into Direct Costs. Direct Costs subtracted from Net Sales leave Gross Profit.

THE OVERHEAD BUDGET

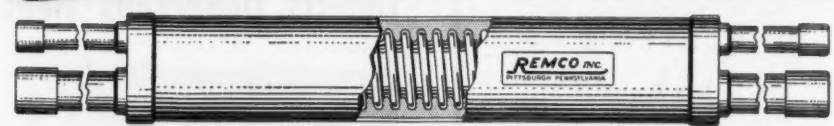
Overhead is arrived at from a separate budget of all indirect costs, called an Overhead Budget or sometimes an Operating Expense Budget. It is made up for each month, with semi-annual and annual totals. If you wish to do so you can go further and break Overhead down between the various departments or activities on the Profit-and-Loss Budget, proportionately according to the Net Sales of the various departments or classes of business.

Table 2 is an Overhead Budget that would apply to the business for which Table 1 is the Profit-and-Loss Budget. The Profit-and-Loss Budget is the main budget; the Overhead Budget consists merely of sub-totals and items making up the Overhead Total in the P and L Budget.

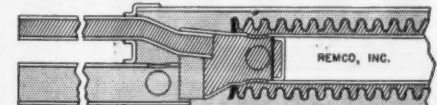
Tables 1 and 2 comprise a typical example of the budget of a sizable service organization, to illustrate how a budget is built. It is not intended to depict a model business operation, although it does indicate good management.

(To Be Continued)

REMCO "Liquid-Fin" Heat Exchangers



Soft annealed "O.D." tube liquid and suction connections simplify stocking, since they may be flared or sweat, bent to any desirable shape or direction or shortened as desired for the individual job.



Liquid flows inside the spiral corrugations in "prime" heat exchange relationship with the colder higher velocity suction gases which travel outside the rapid-transer "Liquid-Fin" heat exchanger element. Capacity per unit size is very high.

The industry now has sufficient test data and actual field experience on suction-liquid line heat exchangers to fully appreciate the substantial increase in system capacity and vast improvement in lowside and refrigerant control performance to be gained by their use. They now are accepted as standard components to be included in every new and existing commercial job. Keep in mind, the lower the lowside temperature, the greater the need for, and advantage of, a heat exchanger.

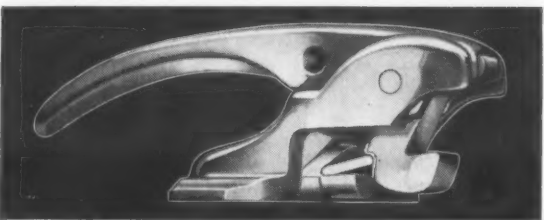
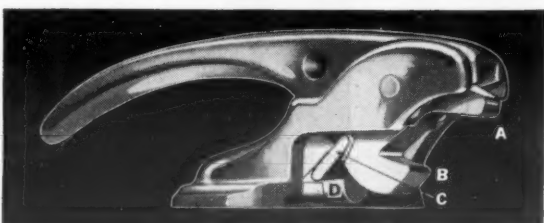
Straight through design of liquid and suction connections, plus 125% minimum flow areas, definitely precludes the possibility of pressure drop in either the liquid or suction circuit, even under maximum operating conditions.

Because the suction gas is on the outside, REMCO "Liquid-Fin" Heat Exchangers may be installed inside or outside of the refrigerated space.

ASK YOUR WHOLESALE... OR WRITE
REMCO, INC. 49th Street & A.V.R.R. Pittsburgh 1, Pa.

FOR a POSITIVE SEAL

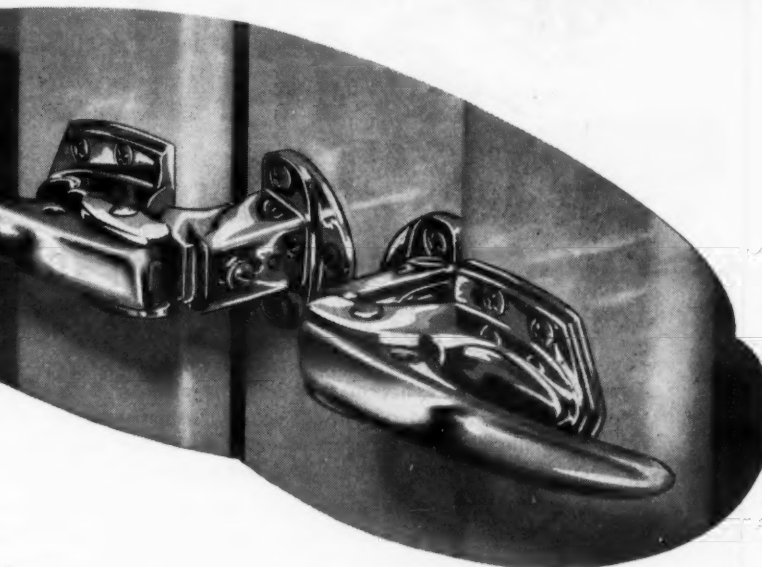
Install a
**POSITIVE
LOCK**



THE LOCK WITH THE Living Action

This patented lock construction never relaxes its upward grip. When the trigger (A) touches the strike, that under-shot jaw (B) takes hold like a bulldog... with constant pressure from a powerful coil spring operating on an off-center plate (C) through the concealed bolt (D). That's why we call it "The Lock with the Living Action"... a principle exclusive with products of the Grand Rapids Brass Company.

by America's Quality Manufacturers of Commercial Refrigerator Hardware



A seal can be no tighter than the lock that holds it. Refrigerator locks by Grand Rapids Brass Company provide living action... a positive, heat-proof closure that persists even when gaskets grow old. Precision-built and beautifully finished, these locks reflect credit on your own product and assure your customer a lifetime of efficient economical service. Available in a full range of sizes to fit the smallest display cabinet or the largest walk-in installation. May we send our catalog? Let us know how we can serve you!



Grand Rapids Brass Company

Makers of Dependable Refrigerator Hardware for over 40 Years

Grand Rapids 1, Michigan

Wall WIRE
PRODUCTS COMPANY



PLYMOUTH • MICHIGAN

Makers of

REFRIGERATOR SHELVES • STAMPINGS
FORMED AND WELDED PRODUCTS

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You'll think the Gold Bond engineers are magicians when you read about the new and revolutionary method of fireproof refrigeration construction they have developed. This completely new method of using Zerocel Insulation gives you greater efficiency and permanence, and, at the same time, means big savings over old fashioned methods.

Zerocel installed with metal lath, channels, and Portland cement plaster replaces old-style construction methods using board forms of insulation. Provides stronger walls, ceilings (that won't fall down), and a better looking job. With this construction, condensation does not occur in the insulation.

- Fireproof
- Will not absorb moisture
- Odorless
- Will not settle
- Immune to fungus, rot and decay
- Vermin-repellent
- Easy to cut with a knife

GOLD BOND
ZEROCEL
INSULATION



This versatile method, a development of National Gypsum Company's 20 years' experience in the construction industry, applies equally well to locker plant, cold storage warehouse, and processing plant problems. Find out all about this new method today! Fill in the coupon below and mail to Industrial Division, National Gypsum Company, Buffalo 2, N. Y.

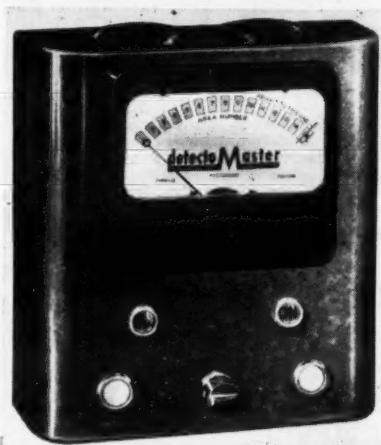
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 Gentlemen:
 Please send me a FREE copy of
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What's New

Thermostat Network Detects Dangerous Heat



CANANDAIGUA, N. Y.—A fire and cold alarm system, called the Detecto-Master, which will warn of undue temperature changes in any one of 15 areas and point out the area in which the danger exists, is being manufactured by the Lord-Taber Co., Inc., here.

The firm also makes a smaller alarm system, Detecto-Master Junior, with five alarm points, for homes and medium-sized structures.

Detecto-Master consists of a central control unit connected by a two-wire circuit to a series of detector thermostats placed in the areas to

be guarded, the manufacturer explained.

When the system is operating, a green light remains lit on the control panel. When one of the thermostats detects an abnormal temperature, the normally closed contact points on the thermostat opens and a warning travels to the control center.

The green light goes out. A red light goes on and a klaxon horn sounds. A needle indicator moves to the number on the open face dial that indicates the area covered.

If needed, the manufacturer said, any one of these areas covered by a master thermostat, could be wired with 300 auxiliary thermostats attached to the master thermostat.

In the junior model, the system uses a single wire circuit and does not point out the danger area.

Standard settings on the thermostats range from 20° to 200° F., the company said. However, special settings can be arranged if desired.

Besides detecting the danger of fire, the system can be used to warn against freezing temperatures around water pipes, warn against rising temperatures in home freezers or refrigerators, guard air conditioning ducts from temperatures that might cause static ignition of dust particles, and reveal power failures in electrical equipment, the manufacturer asserted.

Airserco Introduces Evacuator for Hermetics

LIMA, Ohio—Airserco's new portable electric evacuator was recently introduced here by Emmet C. Williams, president of Airserco Mfg. Co., at a meeting of the Lima chapter of Refrigeration Service Engineers Society, according to Myron L. Mowrey, educational director for the chapter.

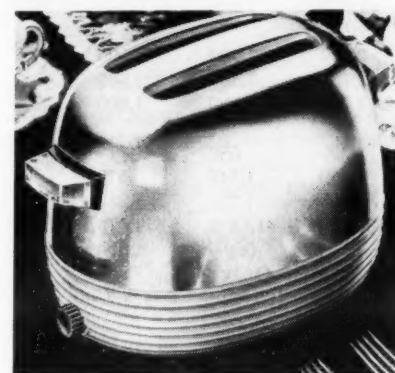
The newly introduced product is said to permit service engineers to evacuate hermetic units, change oil in compressors, and to aid in other time-saving short-cuts.

Proctor Pop-Up Toaster To Enter Market Oct. 1

PHILADELPHIA — On Oct. 1, Proctor Electric Co. here will offer to the public the latest addition to its line of thermostatically-controlled appliances, a new, fully automatic pop-up toaster equipped with a sliding, removable crumb tray.

Marked to retail for \$22, the appliance is said to be the winner in the Proctor Design Polls conducted in department stores throughout the country.

Oval in shape and designed in two-tone chromium, the shell of the toaster is drawn from a single piece of high-grade steel. The upper portion is finished in highly-polished



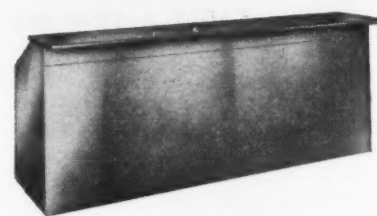
chromium, while the lower part is ridged.

Base of the toaster and the color-control knob are of black phenolic resin, and the handles are of lucite.

Mechanical features reportedly include "grid-glo" elements of "Duroc," a heat-reflecting development used in place of mica; knurled, heavy-gauge nichrome wire wound on these elements; new-type grill wires; and a "mechanical heart" said to be easily and quickly removable for servicing.

Proctor lists complete heat distribution, single button mechanical control, 1,000 watts and 3,000 cycle, six-foot cord as other features. The toaster operates on a. c. only.

Chief claims made for the unit are that it will not only toast moist, medium, or dry bread to the color desired with only one adjustment of the control knob but reheat cold toast without burning or drying it.



Dry Beverage Cooler Has Service Bar Top

CLEVELAND — New model dry beverage cooler introduced by National Cooler Corp. here features a service bar top.

Refrigerating features of the beverage coolers are similar to those of other beverage coolers in National Cooler's line. However, the new model has an all-stainless steel exterior, and the service bar top, also of stainless steel, is mounted on plywood, and extends 6 in. on the customer's side and 1 in. on each end.

"Because of the enhanced beauty of the polished stainless steel exterior, the beverage cooler can be placed in a prominent position, other than a bar or counter, and serves a purpose as a useful service bar, too," declares A. J. Litt, vice president of the company.

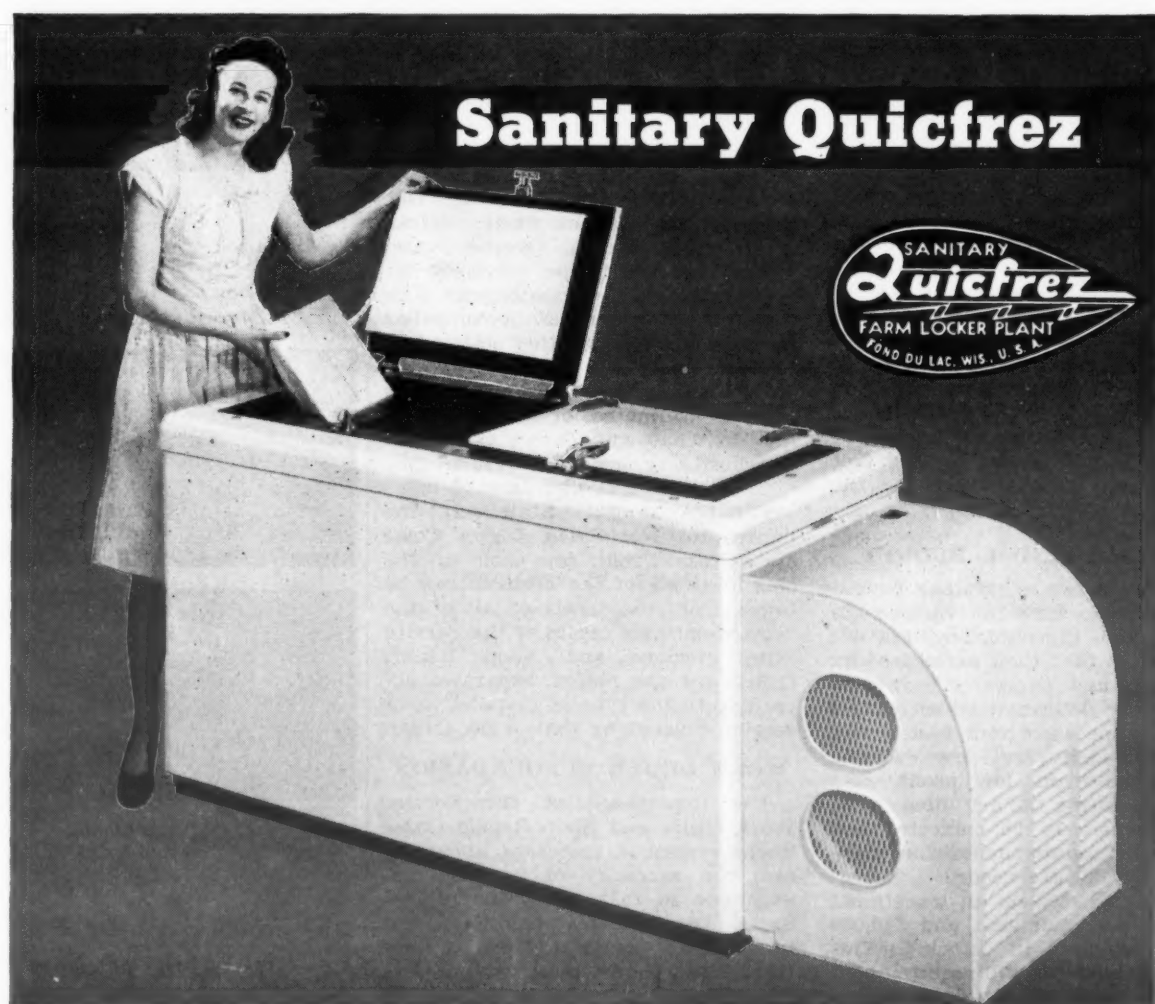
The service bar top can be purchased separately and can also be attached to the company's black Morocco models.

Drink Dispensers Made For Several Varieties

ST. LOUIS—Multiplex soft drink dispensers are now being designed for use with specific drinks, such as Coca-Cola, root beer, grape, orange, or lemon, the manufacturer, Multiplex Faucet Co., here has announced.

In addition, the company is making a new model dispenser equipped with two faucets so that both Coca-Cola and root beer can be served from the same dispenser, it added.

The dual dispenser, known as Model 42, is manufactured in the counter type only. Single faucet dispensers, Model 22, are made in both counter and rail types.



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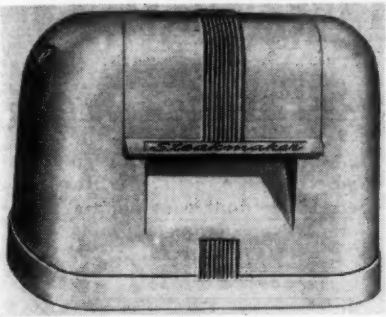
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Ice Refrigerators for more than 40 years — Quicfrez Farm Lockers Since 1939

What's New (Cont.)



Steakmaker

Firm Expands To Produce Electric Meat Tenderizer

MINNEAPOLIS—A new plant that adds 10,000 sq. ft. of manufacturing space to its facilities has been acquired by the Federal Engineering Co. here, A. L. Jackson, president, has announced.

The firm will use its quadrupled facilities to increase production of its Steakmaker all-electric meat tenderizing knitter, Mr. Jackson said. Mr. Jackson invented the appliance, which introduced power driven fixed blade rollers that are claimed to cut rather than chop, crush, or slash the meat.

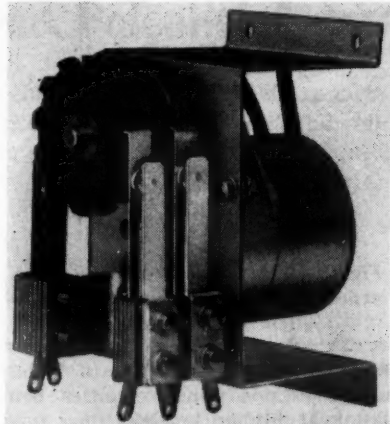
The Steakmaker is produced in two models, the standard model 200 and the deluxe model 400. The latter model permits removal of the tenderizing unit from the Steakmaker for cleaning of the combs and blades, Mr. Jackson said.

Cramer Makes New Timer For Automatic Equipment

CENTERBROOK, Conn.—The R. W. Cramer Co., Inc., here has introduced the new model VF timers, generally intended for built-in applications for automatic vending machines, dishwashing machines, automatic laundry machines, and other types of equipment requiring time and sequence control.

The timers are available from 1 to 6 circuits for 6, 24, 110 and 220 volts, 50 or 60 cycle. Contacts have a 10 ampere rating and can be supplied in single or double throw. Dependence on applications, the contacts are either of the slow make or break, or with snap action.

The over-all width of the timer is approximately 2½ in. and length 3½ in. The height is from 2½ in. for the single cam unit to 3½ in. for six circuits.



Model VF Timer

The timers are equipped with the Cramer synchronous motor type SX. They are available in a variety of speeds from 1 r.p.m. through ½ r.p.h.

Redmond 'Micromotors' Have 3-Piece Cast Frame

OWOSSO, Mich.—Redmond Co.'s improved 4-pole shaded pole motor, designated type "T" and sold under tradename "Micromotor," is being built in sizes from ½ to ¼ hp.

It has a three piece die cast frame with a steel outer shell enclosing the air-stream cooling system. In the flush-weld rotor, every slot is copper filled flush with surface, precision skewed and welded, the surface is machined and rust inhibited, and the assembly accurately balanced. Windings are resistant to oil or atmospheric conditions. Large porous

bronze bearings are broadly spaced, and each bearing is individually fitted



Redmond Motor

to shaft at close tolerances and spring tension centered.

Positive oil return is accomplished by special oil slingers and oil retainers. An unusually rigid base is provided by multiple curvatures formed in heavy gauge pressed steel.

Munson, Koehring Head Herman Nelson Divisions

MOLINE, Ill.—Herman Nelson Corp., manufacturer of heating and ventilating equipment, has named Morris G. Munson as manager of the unit ventilator division and Robert C. Koehring as manager of the portable products division.

In their new positions, these division managers will coordinate the activities of all departments of the company to further the development and marketing of unit ventilators and portable products.

NEMA Pamphlet Promotes Electrical Cooking Benefits

NEW YORK CITY—Cooking Electrically, a new 12-page illustrated booklet being circulated by the National Electrical Manufacturers Association, was written to sell the advantages of cooking electrically without promoting any particular brand of electric range.

Suggested for use as direct-mail, hand-out, or for use of salesmen or demonstrators, the booklet is being sold by the association at the rate of \$70 per thousand copies.

Booklet Explains Kathabar System of Humidity Control For Industrial Applications

TOLEDO, Ohio—Principles of operation and details of application of the Kathabar system of selective humidity control for industrial processing applications are explained in a new eight-page booklet recently issued by the Surface Combustion Corp. here.

The booklet is entitled "Humidity Control is more important in your plant than you may realize."

It compares the Kathabar system to other common methods of humidity control.

Flexibility of the system is illustrated by a chart giving the various temperature-humidity conditions available from it as applied to one large processing plant requiring different humidity conditions for processing, packaging, storing, and personal comfort.

Numerous installations of the Kathabar system are illustrated within the booklet.

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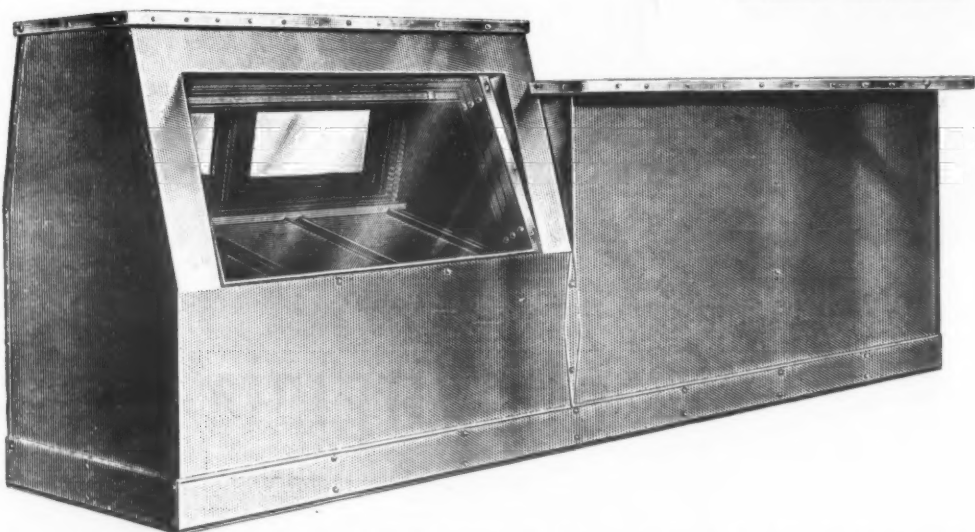
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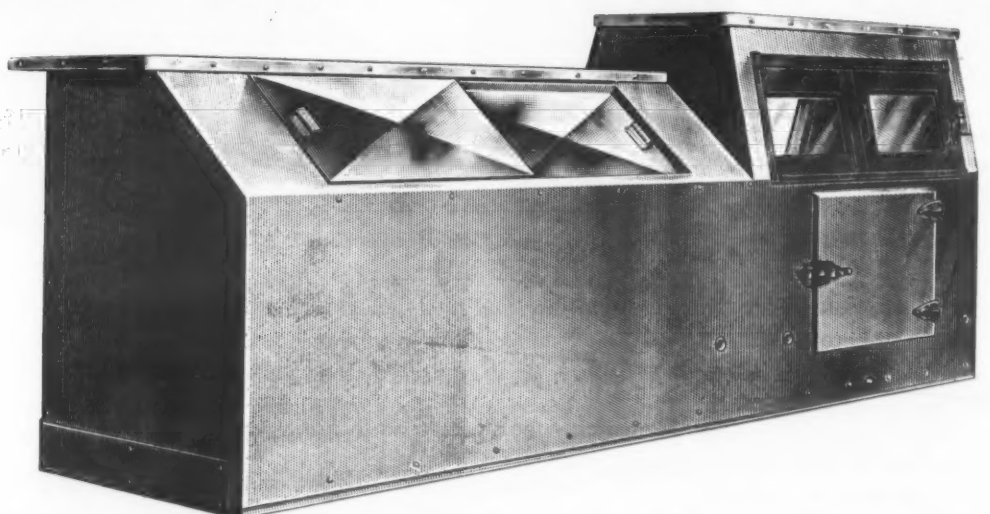
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Front view 4' Display Case and 6' Beverage Cooler; may be had with 6', 8' and 10' Beverage Cooler—all ONE PIECE of equipment. Stainless Steel finish backed up with Weldwood Plywood. Inside Display Case is Stainless Steel—Fluorescent lights outside—THREE Glass front. Inside Beverage Cooler 24 gauge copper bearing metal. Two sets of coils—each compartment separate.

(Mezzanine Shelf in Display Case not shown)



Back view 4' Display Case and 6' Beverage Cooler. Top of Beverage Cooler extends over front 6"—Top of Display Case and Beverage Cooler Black Satin finish FORMICA on heavy Plywood, beautiful Chrome Trim around edge of both Tops. Hard Rubber Doors in Display Case—Stainless Steel slide doors in Beverage Cooler with Stainless Steel tracks.

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NORTH CAROLINA

The KEY to Air Conditioning

By James J. LaSalvia

This is the second instalment of a new series of articles designed to give dealers, salesmen, and all others interested practical information and data on how to apply air conditioning. Written in an easy-to-understand fashion by an engineer with many years of broad experience in the comfort cooling field, these articles will prove very profitable to the reader.

Ventilation (Cont.)

NATURAL VENTILATION

Ventilation may also be applied in a natural way, that is by natural infiltration, depending entirely on outside wind velocities. This infiltration comes into a space through cracks around windows, doors, or special openings provided for such purposes. Ventilation in this manner may or may not be sufficient to meet the requirements.

This natural infiltration is measured by air changes per hour. This means that a certain amount of air enters a given space and changes the air in that space a number of times per hour. (This is based on the maximum wind velocity of 15 miles per hour, which is taken as the average in this country.)

For present general construction the number of air changes per hour has been well established by practical experiments.

The following air changes can be used for different exposures to the atmosphere:

1. For a given space without any windows, the natural infiltration is so small that it can be neglected for ventilation requirements. Ventilation requirements in this particular case should always be met by mechanical means.

2. Where a given space with windows is exposed to the atmosphere on one side only, use one air change per hour for natural infiltration. This may or may not meet the ventilation requirements. (See Fig. 2.)

3. Where a given space with windows is exposed to the atmosphere on two sides, use one and one-half air changes per hour for natural infiltration. This may or may not meet the ventilation requirements. (See Fig. 3.)

4. Where a given space with windows is exposed to the atmosphere

on three sides, use two air changes per hour for natural infiltration. This may or may not meet the ventilation requirements. (See Fig. 4.)

5. Where a given space with windows is exposed on all sides to the atmosphere, use two air changes per hour for natural infiltration. This may or may not meet the ventilation requirements. (See Fig. 5.)

6. On some structures the windows are weather-stripped, or caulked, or in general are tight, the natural infiltration has been practically eliminated. On such spaces the ventilation requirements must be met entirely by mechanical means.

HIGH CEILINGS

Ventilation must also be considered for the ceiling height of the space to be conditioned. The higher the ceiling, the fewer air changes per hour are required.

It is obvious if a certain number of occupants are in a given space (say with an 8-ft. ceiling height), it will take a certain length of time for the air in the space to become vitiated if ventilation is not provided. If this ceiling were raised to 20 ft. high, it would take two and one-half times as long for the air in the space to become vitiated. And at various heights between 8 and 20-ft. ceilings, the length of the time would vary according to the height of the ceiling.

It is necessary then to take this factor also into consideration when figuring ventilation requirements.

TALL BUILDINGS

One other factor which must be considered for ventilation requirements is a space located in tall buildings, especially above the tenth story. Natural infiltration in this case is

How Room Exposure Affects Natural Ventilation

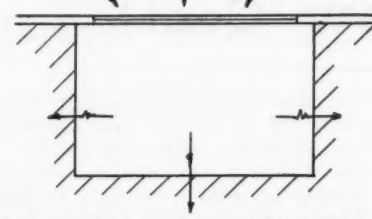


Fig. 2—When a room with windows is exposed on one side only, natural ventilation usually supplies one air change per hour if the wind velocity averages 15 m.p.h.

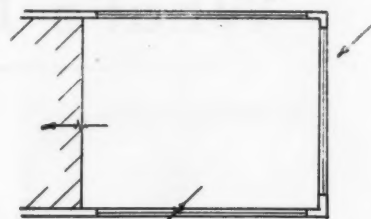


Fig. 4—With three sides of a room exposed, there will be two air changes per hour with natural ventilation.

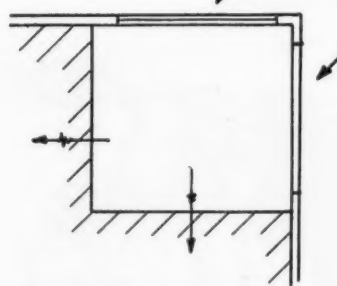


Fig. 3—With two sides of a room exposed, natural ventilation supplies 1½ air changes per hour.

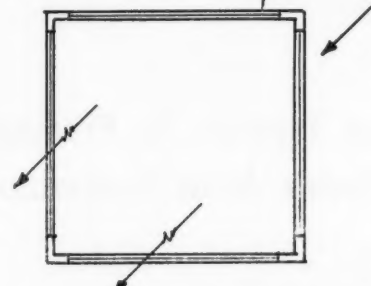


Fig. 5—Two air changes per hour result from natural ventilation with four sides exposed.

greater than at lower floors. This is due to outside wind velocities being higher at higher levels.

The natural infiltration on ground level and up to about 100 ft. above ground level is taken to an average of 15-mile wind velocity. At higher levels the wind velocity is greater, and therefore the natural infiltration becomes greater. This increase will vary from 0% at the 100-ft. level to 100% at 500 ft.

MECHANICAL VERSUS NATURAL VENTILATION

It has been found in practice that the majority of air conditioning systems cannot use natural infiltration to meet the ventilation requirements, for the following reasons:

1. Natural infiltration is not sufficient.
2. Natural infiltration cannot be controlled.
3. With natural infiltration it will be necessary to operate the cooling system at a lower suction temperature to meet the inside design conditions.

It is good practice at all times to bring the ventilation or outside air through the air conditioner for the following reasons:

1. Proper amount can be brought in.
2. It can be controlled.
3. This will allow the cooling system to operate at as high a suction temperature as possible and will reduce operating costs.
4. This will build up pressure in the space, thus eliminating natural infiltration and causing exfiltration, which will be beneficial.

It is good practice to create a slight pressure in the space with the supply from the air conditioner, and this can be accomplished only by bringing the ventilation from the outside through the air conditioner. The slight pressure in the space will cause the amount of air taken from the outside to go out of the room through the cracks around windows and doors. This is what is known as exfiltration.

When all outside air is used as total air from the air conditioner, a way must be found to return this air to the outside. In general a certain amount is figured to go out through cracks around windows and doors; some is taken through toilet rooms (and then to the outside by means of exhaust fans); and the remainder is taken out by fans in the space itself.

(To Be Continued)

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Report from Colombia:

Public 'Education' In Refrigeration's Value Called Key to This Good Potential Market

Editor's Note: Following is the third in a series of field reports analyzing the Latin-American market for refrigeration and air conditioning equipment. The author of these reports, which are being written especially for the NEWS, recently toured the countries he is discussing.

By Philip H. Berritt, American Refrigeration Export Co.

Because of the combined factors of restricted imports and insufficient appreciation of its advantages, there was no abundance of commercial refrigeration equipment in Colombia, as was found to be the case in other Latin-American countries previously visited and reported on.

However, there is a considerable unmet demand for refrigeration equipment, and, as soon as import licenses can be obtained, a good volume of business can be expected.

But a great deal depends upon how far the public can be educated to the need for refrigeration. Even in the larger cities very little perishable food is kept over from one day to the next because of inadequate refrigerated storage space. Meats and vegetables in the large public markets are displayed in the open and are not kept under refrigeration.

Frozen foods in particular are virtually unknown. Although the public is now becoming interested in them, there is still a great deal of educational work to be done in this field.

The coastal cities in particular are especially interested in frozen foods because, strange as it may seem, it is frequently quicker and cheaper to import frozen foods from the United States than it is to bring fresh fruits to the coast from the interior due to a lack of adequate transportation facilities.

Ice cream cabinets are in considerable demand in the coastal cities, but the consumption of ice cream in the other parts of Colombia is very limited. In the interior, the most popular frozen confection would be similar to what we call "ices," which are sold in large quantities very cheaply.

Use of air conditioning equipment is confined almost entirely to the coastal cities, especially Barranquilla and Cartagena, where the climate is most uncomfortable almost all the year-round. But, as in other Latin-American countries, air conditioning units must be air cooled because of a lack of water throughout the year and especially during the dry seasons. Even such water as is available is often hard and full of minerals, tending to clog the condensers.

Apart from Barranquilla and Cartagena, most of the other principal cities are located at considerable altitudes so that it is never excessively warm but in most instances pleasantly cool both day and night.

Whatever air conditioning is used in Colombia is usually of the window-model type of 1/2, 3/4, or 1-hp. sizes. Larger installations are generally confined to the coastal cities.

Business conditions in Colombia at the time this was written were somewhat disturbed for a number of reasons:

There was considerable concern over the possibility of a drop in the price of coffee, which is the mainstay of the country's economy.

Severe restrictions have been placed against the issuance of import licenses, especially on some refrigeration equipment which is still considered a luxury.

The ports of Buenaventura, Cartagena, and Barranquilla were terrifically congested and unable to handle all of the import traffic.

All of this discourages importers who are now reluctant to place orders. But, even when they wish to place orders, they have to get import licenses, which are not always easy to obtain and cannot be had without proof that the material is available for prompt shipment by the manufacturer.

Because of these conditions, banks have begun to limit the granting of credit to importers. This is confirmed by a statement made by our agent:

"You may furthermore have heard from your other clients in Colombia that the situation of import licenses has become much more difficult here than it was at the time of your visit and that, momentarily, chances of getting a license to import anything in the line of refrigeration are practically nil."

Another reason why importers hesitate to place extensive orders at this time is that they must deposit in cash an amount equal to 5% of the order, when they apply for an import license. If and after they get the license, the orders must actually be delivered in 45 days or that 5% is generally completely lost.

Furthermore, because of the congestion at the ports, importers often have to wait two to three months to receive the goods after they reach those ports, during which time their money is tied up, especially if the goods have already been paid for either against letters of credit or against sight drafts.

As an example of the state of congestion, it is interesting to note that two distributors of two different brands of household refrigerators have been bringing their refrigerators in by chartered cargo planes.

Another thing is that, during the dry season, when the rivers are either dried up or too shallow to carry river boats, imported goods must remain at the ports and cannot be delivered to some of the interior cities, which are connected with the sea coast only by means of these rivers.

Another factor affecting the sale of refrigeration equipment in Colombia is the poor voltage, especially during the dry season, as most power is hydroelectric. During the rainy season, it is somewhat better, but even at best it is seldom over 60/70 volts in some cities. As a result, where a 1-hp. normally should operate, a 2 and sometimes even a 3-hp. motor is used.

Although there might be some slight recession in Colombia, no one—not even the banks—expect a serious slump. A building boom is expected to continue and the demand for refrigeration equipment is increasing, so that from the long-range standpoint, Colombia will be an excellent market once the present period of uncertainty passes.

In doing business in Colombia, some firms have made the mistake of giving exclusivity for the entire country to a concern in Bogota and then selling direct to firms in other cities. Other firms were found to have given exclusivity for the country to a firm in Bogota and then waited for orders from other Colombian cities.

Neither of these two practices is correct. If a United States manufacturer gives a firm in Bogota exclusivity for the entire country, he should not sell direct in other cities. On the other hand, it is not wise to grant exclusivity to any one concern located in the capital, unless it has sufficient coverage through branch offices in the other cities.

What most manufacturers do and what probably is the best thing to do is to have separate distributors in the four principal areas and in the four principal cities which are the sales centers for those areas. Those cities are: Bogota, Cali, Medellin, and Barranquilla.

It is almost impossible for any one firm in Bogota to cover the entire country, especially because of transportation difficulties.

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Efficient Service Operation Promotes Sales for Both Dealer & Manufacturer, Stresses Hotpoint Executive

Editor's Note: Since the following remarks by Mr. Truesdell reflect the thinking of Hotpoint Inc., in its drive to expand from a \$20-million-a-year to a \$100-million operation, they reveal the importance this company attaches to the product service function of dealers, and throw new light on the close relation of sales and product service.

By Leonard C. Truesdell,
Vice President, Hotpoint Inc.

The sales promotional possibilities of product service are too often overlooked, both by dealers and manufacturers, in favor of more direct methods. An efficient service operation can be a dealer's most effective sales builder; its general neglect can undermine the manufacturer's sales promotion program.

"Selling with service" has a distinct psychological advantage over advertising. Prompt, efficient service not only keeps the dealer's name and product before the public; it creates good will. You might say that it is a dealer's "reputation in action."

In a buyer's market, a good service repairman is the best opening wedge a dealer has; all doors open for him. In contrast, service poorly performed shuts the door on future sales. In other words, a dealer's continuing reputation is only as good as his product service operation.

Many dealers make the mistake of considering service as little more



Here is a typical training session in which distributors' product service managers watch a demonstration of cabinet and sink installation.

than a necessary evil. They render service to customers grudgingly, as though convinced that these people will never again be in the market for appliances. Customers are quick to sense this reluctance to be of service and their immediate reaction is that they have made a mistake in buying from a "small-time" company that does not stand behind its product.

On the other hand, alert dealers have been quick to capitalize on the advertising value of prompt service. Taking their cue from the telephone and utility companies which have achieved a nation-wide reputation for prompt, courteous repair service at any hour of the day or night, such dealers have found that efficient service goes hand in hand with effective selling.

Through his product service department, the dealer has one of the finest sales approaches available. It is surprising that more dealers have not taken full advantage of it. Even on service calls out of warranty, the serviceman receives a welcome; customers do not object to paying for good service. They are impressed when their appliance is promptly restored to operating condition; they are open to suggestion from a "man

who knows," and they are receptive to an intelligent sales talk.

Realizing this, some dealers equip their servicemen with attractive trucks and supply them with neat uniforms, so that looking the part they may function both as servicemen and as specialized appliance salesmen. Others dealers make a practice of attaching a call-back label to an appliance when it has been serviced so that the customer may have at hand the telephone number and a list of appliances serviced and sold by the dealer.

The serviceman is in an excellent position to uncover new prospects for the dealer and the ability to uncover these leads should be a consideration in the choice of product service personnel.

Since he has frequent access to kitchens in the dealer's territory, the serviceman can make a specific report on the condition of appliances, the customer's needs and preferences, and the possibility of another sale.

Neglect of consumer education by many dealers is responsible for a large percentage of unnecessary service calls. The instruction of customers in the simple fundamentals

(Concluded on next page)

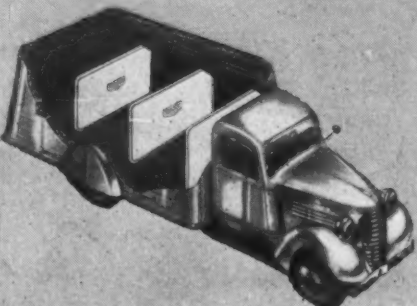
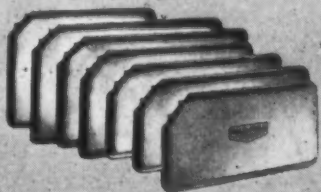
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- 2 Maximum prime surface.
- 3 Highest rate of plate heat acceptance.
- 4 No possibility of short circuiting the flow of refrigerant which flows in one continuous pass from inlet to outlet.
- 5 Oil logging positively prevented.
- 6 Minimum pressure drop.
- 7 Tested to 300 lbs. per square inch pressure.
- 8 Has an appreciably higher "K" factor.
- 9 Thoroughly cleaned and dehydrated.

For transportation of perishables, Kold-Hold Truck Plates prevent loss from spoilage, preserve truck bodies and eliminate unnecessary time losses from loading and unloading.

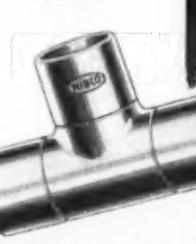


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KOLD-HOLD MANUFACTURING COMPANY 500 E. HAZEL STREET, LANSING 4, MICHIGAN

(Write For Complete Catalog!)

Nothing but the Finest

IN THE NEW
RESEARCH
BUILDING
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RALSTON PURINA
COMPANY IN
ST. LOUIS



NIBCO WROT Copper
FITTINGS AND
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ARE USED THROUGHOUT

IN DESIGNING the new research building of the Ralston Purina Company in St. Louis, the architects and engineers chose only products which had been demonstrated to be the very best in every department of construction. Naturally they chose copper plumbing with Nibco Wrot Copper Fittings, Valves and Cast Drainage Fittings for the water system. This means a permanent, trouble-free installation for the lifetime of the building . . . with no maintenance cost. When you specify and install Nibco Fittings and Copper Plumbing, you are giving your customers a better job and building your own reputation for quality and dependability.

- * RUST-PROOF
- * LIGHT WEIGHT
- * SHORT ROUGH-IN DIMENSIONS
- * LEAK-PROOF JOINTS
- * EASY INSTALLED

NORTHERN INDIANA BRASS CO.
ELKHART, INDIANA • VALVES AND FITTINGS SINCE 1904

Mr. Dealer: How Does Your Service Stack Up?

A dealer wishing to examine his product service operation can assess it in short order by supplying honest answers, says Mr. Truesdell, to the following questions:

(1) Do I cooperate with the manufacturer by reading the product service literature he supplies; by insisting that the servicemen keep abreast of new developments by this means?

(2) Do I take advantage of training courses offered by the manufacturer?

(3) Do my servicemen have a thorough knowledge of all products they service?

(4) Do I endeavor to make the service department a good advertisement by insisting on courtesy, promptness, and efficiency?

(5) How about the appearance of servicemen? (White overalls or greasy trousers?)

(6) Is our service truck a good advertisement?

(7) Do my servicemen have sales ability? Are they given an incentive to develop this ability?

(8) Are my servicemen expert at diagnosing trouble from common symptoms?

(9) Is the serviceman equipped to handle most cases with one call, or are call-backs frequent?

(10) Do I follow through to see that all new appliances are in perfect working order and properly installed after a sale has been made?

(11) Do I take care to see that every purchase is accompanied by a certificate of warranty?

(12) Do I supply customers with a complete demonstration and explanation of a newly purchased appliance?

(13) Do I see to it that every customer request for service is answered promptly?

(14) When delays are unavoidable, are customers promptly informed?

Honest answers to these questions may supply the dealer with a few good reasons why his product service department may or may not be succeeding. Perhaps the two most important factors responsible for the success of any service operation are promptness and courtesy.

formation is entered on a file card for the serviceman so that he may carry with him all materials required to complete the job with one call.

The file card system also serves as a convenient "case history" as well as protection against customers who exaggerate the number of service calls required, since the dealer or serviceman can supply the exact number and dates of previous calls and a detailed record of repairs made.

If the file also includes the approximate age of all appliances in the home, it serves as an excellent prospect list for the dealer.

While the manufacturer expects support from the dealer in rendering product service, most companies furnish substantial aid to the dealer in carrying out this important function. Hotpoint conducts regular training sessions all over the country to assist distributors and dealers in the

education of product servicemen.

Designed to supplement such training is the recently developed *Product Service Handbook*. This book in the hands of a retail dealer not only benefits the service repairman, but is also of interest and help to sales personnel as well. The handbook contains reproductions of over 100 product service charts, together with valuable product service information keyed to the charts.

Instruct Customer --

(Concluded from preceding page)

of operation and maintenance of electrical equipment should be made at the point of sale and followed through on installation. When this is neglected, the dealer stands to lose not only time and money on so-called service calls, but what is more important, customer good will.

Although every manufacturer supplies some sort of instruction book with his product, this should merely supplement a word-of-mouth instruction and demonstration by the salesman. Thorough instruction of the customer at the time of sale is easier and more effective than hours of explanation after the customer has developed what he considers a valid complaint.

When the domestic refrigerator was a comparative novelty, the need for consumer education was evident and dealers gave thorough instruction in refrigerator operation. Today, dealers tend to take such knowledge for granted and overlook the fact that many customers are purchasing their first electric appliances.

This accounts for an annual crop of letters to the manufacturer from customers who complain that they cannot prevent milk from freezing in their refrigerators during the winter months.

The cause is invariably the same: the refrigerator has been placed in a location where the temperature drops below 30° F. If these customers had been instructed in the basic principles of refrigeration, they would know that a refrigerator removes heat in order to maintain a desired temperature, but that it cannot prevent that temperature from dropping lower when heat is otherwise removed.

Consumer inquiries directed to the manufacturer indicate weaknesses in

the system he is constantly striving to strengthen—his dealer set-up. It is, I believe, the common goal of most appliance manufacturers to create in the mind of the consumer a close association of the product and the dealer.

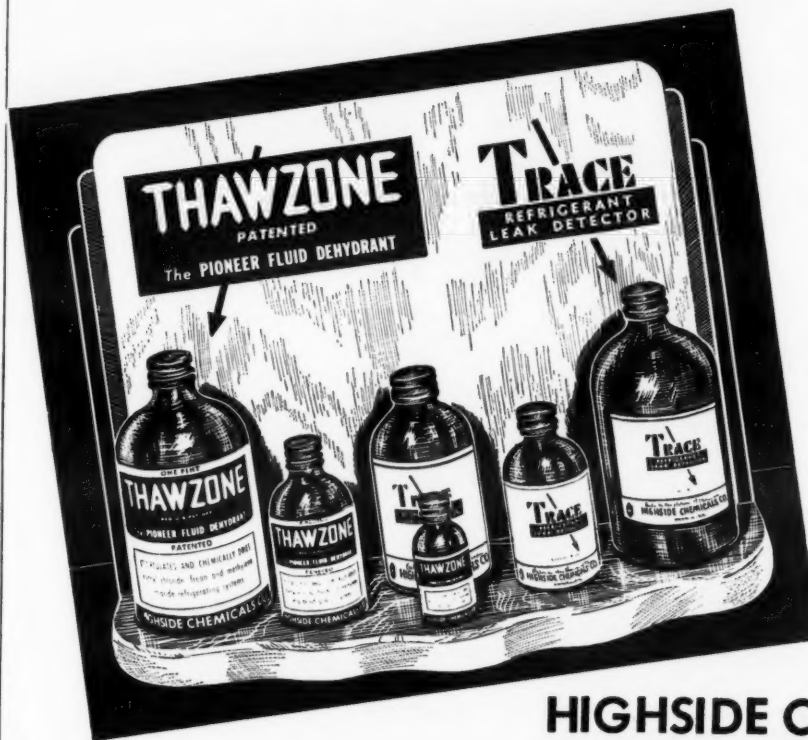
The manufacturer works to promote the dealer's reputation on the premise that a product is no better than the dealer who represents it. When a customer's request for service by-passes the dealer, neither the manufacturer nor the dealer profit. The time and money involved in dealer promotion is lost as far as this particular dealer is concerned.

Appliance manufacturers receive annually a large number of unqualified requests for refrigerator unit replacements. These requests come from dealers who employ inexperienced or incompetent servicemen. Here again the product service operation adversely affects the sales operation, for the unnecessary inconvenience and delay caused the customer can only result in dissatisfaction. And discouraged customers mean lost sales in the future.

The replacement of a relay or a control would eliminate 90% of these unqualified requests for replacements, as any good serviceman knows. It is evident that the dealer who invests in trained service personnel, and who makes it a policy to further the education of his men, saves money in the long run and safeguards his future.

When a customer's appliance fails, she has but one desire: to have it back in operation as quickly as possible. When she calls for service she expects the dealer to understand this desire for immediate service. The dealer who satisfies this request promptly and with courtesy builds future sales.

Most well organized service operations secure as much information as possible from the customer who calls or telephones for service. This in-



LET THIS DISPLAY REMIND YOU

... that THAWZONE and TRACE are two "musts" in protecting refrigeration systems and keeping them functioning perfectly with the minimum of attention.

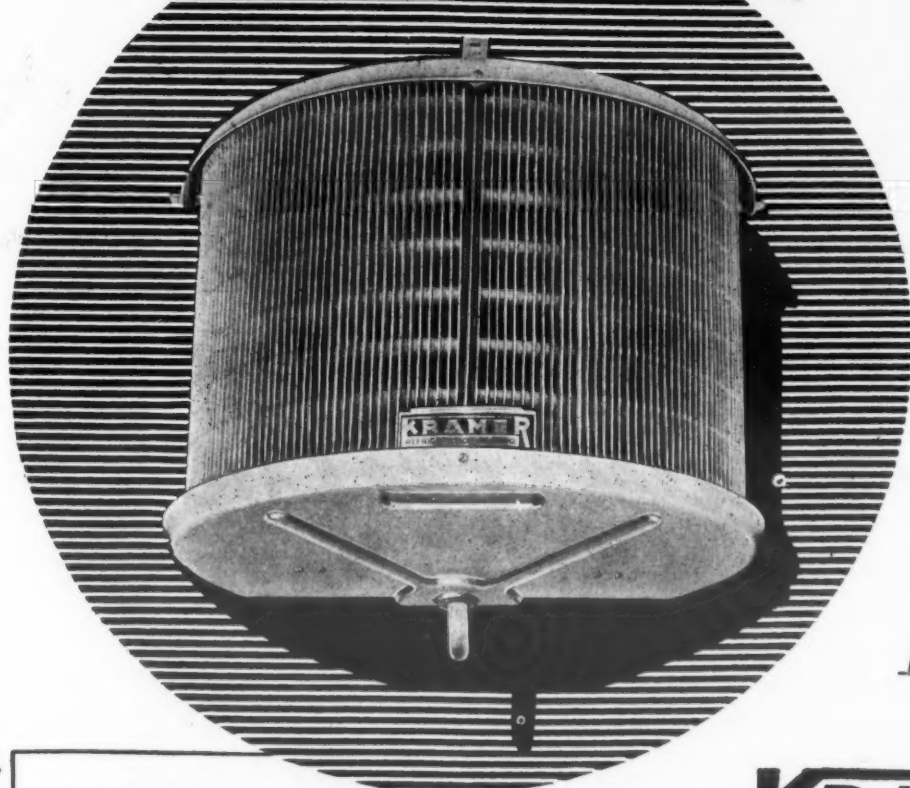
THAWZONE, active, always circulating, destroys moisture chemically, economically, quickly and effectively, in new, reconditioned or old systems.

TRACE is the highly effective refrigerant leak detector with the vivid red color that quickly spots leaks in any refrigeration system... new, old or reconditioned.

You will see this attractive display on the counters of leading refrigeration equipment wholesalers throughout the country.

HIGHSIDE CHEMICALS COMPANY
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Types

**STANDARD
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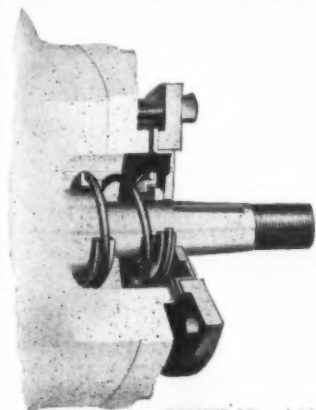
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BULLETIN!

AIR CONDITIONING & REFRIGERATION NEWS announces the first subscription rate change in over ten years. Effective October 1, 1947, the basic subscription rates will be as follows:

1 year\$5.00
2 years\$8.00
3 years\$11.00

Foreign postage \$2.00 per year extra: includes all except Pan-American Postal Union countries, Canada, and U. S. Possessions.

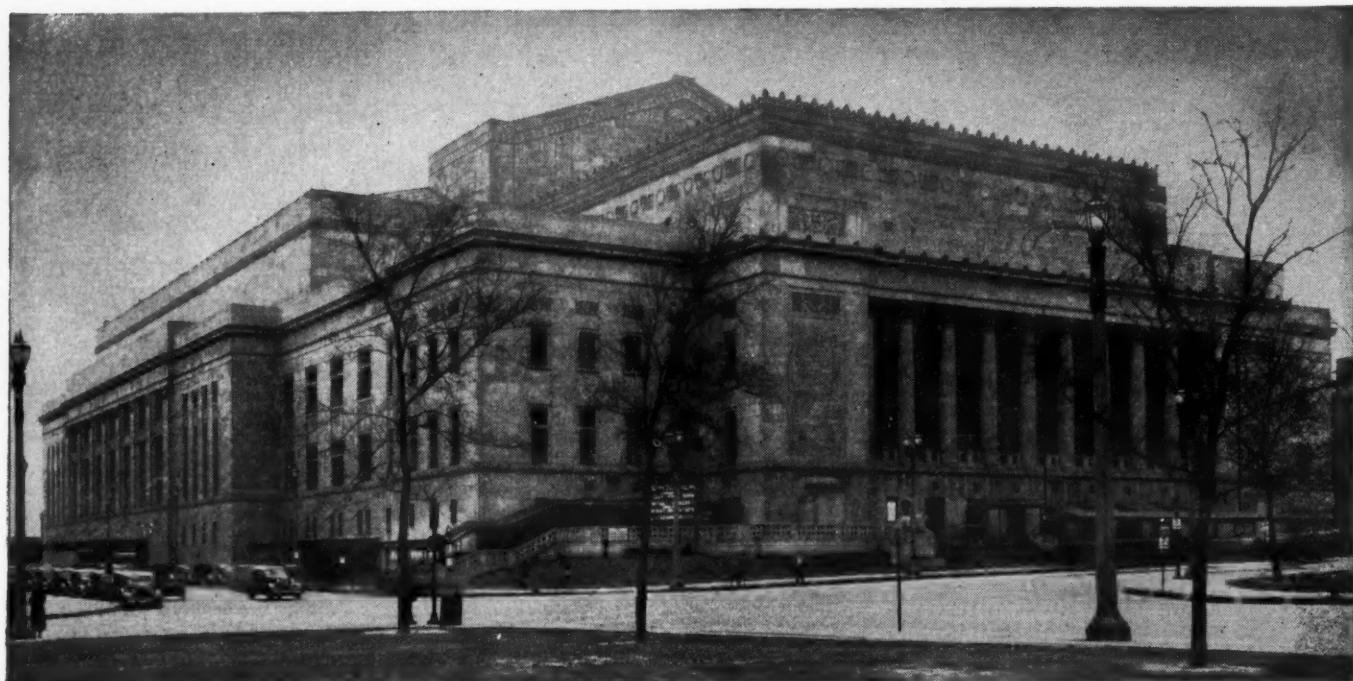
You are invited to enter your new or renewal subscription order now if you want to save an extra dollar.

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New special group rates will be:

1 to 4 one year subscriptions.....	\$5.00 each
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AIR CONDITIONING & REFRIGERATION NEWS, 450 W. FORT ST., DETROIT 26, MICH.



Conventioners Don't Get "Hot Under the Collar!"

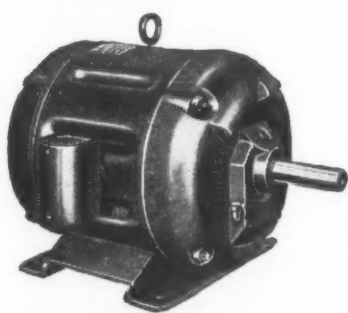
WAGNER Quality MOTORS help keep them cool...

In St. Louis, one of the nation's "hot spots", delegates and guests of the many conventions held in the Municipal Auditorium are kept comfortably cool by an efficient air conditioning system. Among the factors contributing to the efficiency of the system are the motors that drive the air conditioning equipment.

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ized on Wagner Motors. Wagner can help you, too. If you manufacture or use motor-driven equipment, it will pay you to choose Wagner Motors. Users of Wagner Motors also profit by the quick, convenient, nationwide service facilities provided by Wagner.

Twenty-nine branch offices, located in principal cities, are ready to assist you, without obligation, whenever you have a motor problem. Write for Bulletin MU-185 for information on the complete line of Wagner Quality Motors. Address Wagner Electric Corporation, 6441 Plymouth Avenue, St. Louis 14, Mo.



Regardless of what your motor requirements may be—large motors ... small motors ... Wagner makes them all. The motor illustrated is typical of the Wagner line of poly-phase and single-phase motors. Choose a Wagner motor for your next installation.

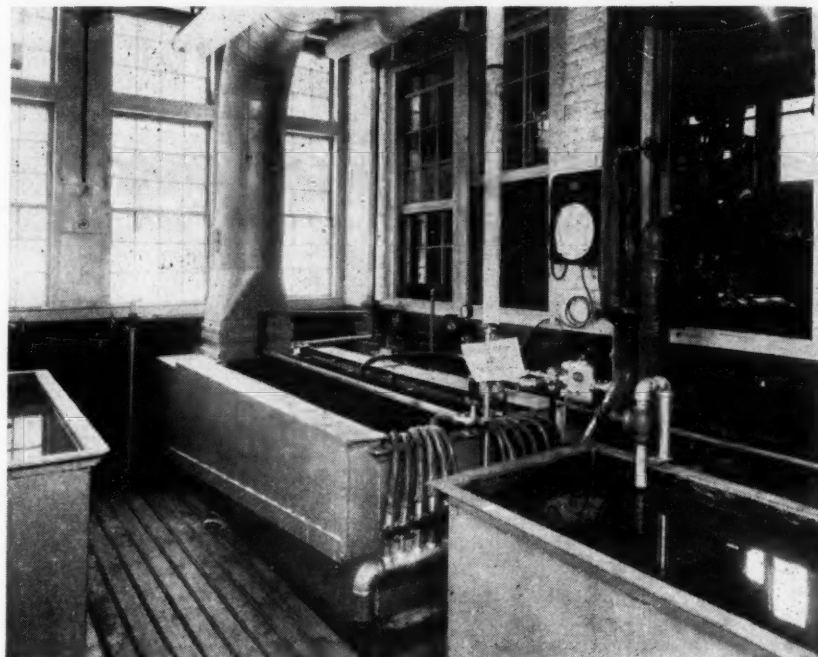


Consult Wagner Engineers on all Electric Motor Problems

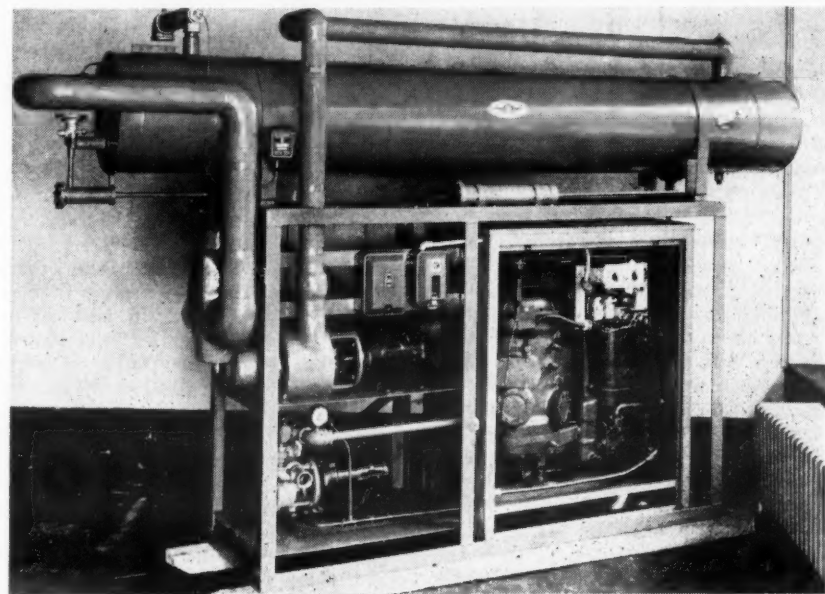


ELECTRIC MOTORS • TRANSFORMERS • INDUSTRIAL BRAKES • AUTOMOTIVE PRODUCTS •

Package Unit Cools Process Tanks



Used to prepare aluminum containers for coloring, the temperature of these anodizing tanks at the Risdon Mfg. Corp. is critical. A built-up package water-cooling unit (seen through the opening at upper right) supplies water to hold the tanks to within plus or minus $\frac{1}{4}$ ° of 50° F.



This is the water-cooling unit which was built up and installed in the Risdon plant by Ace Sales & Service Co., Inc., Airtemp dealer in New Haven, Conn. The 5-CUA Airtemp unit at lower right cools water in the special shell-and-tube cooler at the top. One of the water pumps at lower left circulates the cooled water through the tanks; the other pumps in water from a pond.

5-Hp Built-up Machine Holds Anodizing Tanks At 50° for Color Work

WATERBURY, Conn.—To maintain its anodizing tanks at constant temperature, the Risdon Mfg. Corp., novelty manufacturer here, has installed a built-up package refrigeration unit which supplies 50° F. water to cool the tanks.

Because the Risdon anodizing process is employed to prepare aluminum containers for coloring, a constant temperature of the anodizing baths is necessary to control the shades of color. Thus the water supplied to cool the tanks is held to 50° plus or minus $\frac{1}{4}$ °.

Water-cooling unit for the job was built around a Chrysler Airtemp 5-CUA packaged commercial refrigeration condensing unit by Ace Sales & Service, Inc., Airtemp dealer in New Haven, Conn.

The condensing unit is mounted in a steel frame along with a special shell-and-tube water cooler, back pressure valve, and two water pumps. One pump circulates water from the cooler through coils in the tanks, while the other pump pulls water from a pond.

Installed close alongside the anodizing tanks, which hold a 25% sulphuric acid bath, the complete water-cooling package is controlled by a thermostat that also maintains a constant record of the temperature.

Shoe Repair Shop Installs Conditioning

SYRACUSE, N. Y.—To make waiting customers comfortable and to produce a healthier atmosphere in its store, the Quick Shoe Repair shop has installed air cooling.

AIR CONDITIONING condensers and coolers designed and built FAST

We design, build, retube or rebuild quickly any unit with tubes, standard or special, for Freon, ammonia, CO₂. Materials on hand for prompt delivery. Emergency maintenance work 24 hours a day, anywhere.

Condenser Service & Engineering Co., Inc.
88 River Street, Hoboken, N. J.
Phone WHolman 3-4425. After 6 P. M. or Sundays, WHolman 3-4427

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Michigan Official's Opinion on Plumbing May Affect Installation of Appliances

(Concluded from Page 1, Column 3)
ing found in Section 1 (b) of Act 260, Public Acts of 1933.

Wording of the act indicates that the only refrigerators covered are household units.

Text of the opinion follows:

Opinion No. 475

By Assistant Attorney General Taylor. The State Plumbing Board has requested an opinion as to whether "the connection of domestic hot water storage tanks, water softeners, refrigerators, water heaters and similar domestic appliances with the water supply or drainage system" is included or excluded from the definition of plumbing found in Section 1 (b) of Act 260, Public Acts of 1933 (No. 14,451, M. S. A.).

The section in question reads as follows:

"In this act, plumbing means and includes: (a) All piping, fixtures, appliances and appurtenances in connection with the drainage, ventilation of the same or water supply systems within a building, residence or structure and to a point from 3 to 5 feet outside of the same;

"(b) The construction and connection of any drain or waste pipe carrying domestic sewage from a point within the 3 to 5 feet outside of the foundation walls of any building, residence or structure with the sewer service lateral at the curb or other disposal terminal, and the alteration of any such system, drain or waste pipe, except minor repairs to faucets, valves, pipes, appliances and removing of stoppages; and the connection of domestic hot water storage tanks, water softeners, refrigerators, water heaters and similar domestic appliances with the water supply or drainage system. . . ."

Particular attention is directed to the language which follows the first semicolon of this section, for the question, stated another way, is whether the exception immediately preceding the semicolon includes the things mentioned after it.

A semicolon is defined in Webster's New International Dictionary as a punctuation point "used in printing and writing chiefly in a co-ordinating function between major sentence elements, separating them with more distinction than a comma or dash."

Statutes, such as the one under consideration, are justified in the protection to public health and safety which they afford.

Based alone upon the definition of a semicolon above, it could be said that "the connection of domestic hot water storage tanks, water softeners, refrigerators, water heaters and similar domestic appliances with the water supply or drainage system" should be included in the definition of plumbing and not in the exceptions thereto, but there are other substantial reasons for arriving at the same conclusion.

Paragraph (a) quoted above, when read in connection with the language in question, clearly indicates that the connection of the fixtures in question with the water supply or drainage system was intended to be included in the definition of plumbing.

The things excepted from the definition of plumbing are "minor repairs to faucets, valves, pipes, appliances and removing of stoppages," all of which may be performed by a "jack of all trades," or even a mechanically-minded housewife or husband. The operations following the semicolon require a greater technical knowledge and skill. If such operations should be improperly performed, the safety and health of persons using the appliances would probably be affected.

Accordingly, it is concluded that the connection of domestic hot water storage tanks, water softeners, refrigerators, water heaters and similar domestic appliances with the water or drainage system is included in the definition of plumbing.

M-H Reports \$3,302,343

Net Income for 6 Months,
Doubling 1946 Period

MINNEAPOLIS — Minneapolis-Honeywell Regulator Co. has reported a net income of \$3,302,343 or \$2.51 per common share for the six months ended June 30.

The same period of 1946 yielded a net income of \$1,630,666 or \$1.18 per share. Figures for the quarter ended June 30 were a net income of \$1,493,828 and \$1.13 per share.

25% Drop In Volume Could Wipe Out Profits Of Westinghouse, Price Reports to Stockholders

PITTSBURGH—In reporting a net income of \$21,735,442 for the six months ending June 30, Gwilym A. Price, president of Westinghouse Electric Corp. noted that it would only take a 25% drop in sales volume to put Westinghouse in a position where it would make no profit at all.

"Westinghouse, in common with highly mechanized mass-production industry, is able to earn profits at all only because of the record volume.

"In these times the break-even point—the volume of production at which profit begins—is more than double the corresponding figure in

1941. A decline of only 25% in volume of billings from the current high levels would wipe out profit completely unless payroll and overhead costs drastically cut."

The \$312,338,636 in net sales billed during the first six months of this year totalled more than those billed in all of last year and higher than any full peace time year before 1941.

Orders received during that period amounted to \$418,156,772, an increase of more than \$33,000,000 over the previous six months. Orders unfilled on June 30 exceeded \$673,000,000, nearly one third greater than on the same date last year.

Mr. Price said that profits for the first six months of this year represented a 7% return on sales, lower than any prewar year of high volume operation.

"The profit of 7% on sales shows that the corporation has been moderate in its price increases compared with the increases in payroll and other costs," he declared.

General Refrigerator Opens On Coast with \$10,000 Capital

SAN FRANCISCO—General Refrigerator Corp. of California has been formed in San Francisco, with a capital of \$10,000. Directors are: T. Brown, of Berkeley; and G. Sass and G. Matteucci, both of San Francisco.

✓ CHECK WITH Ranco FIRST

Specialists in Refrigeration	Less Stock to Carry
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Over 12,000,000 Ranco Controls In Use

With more Ranco Controls in use on original refrigeration equipment than any other make, your job as a service man is greatly simplified when you use Ranco refrigeration controls. Choose Ranco, the choice of leading refrigeration manufacturers and service men.

Your Ranco wholesaler is ready to serve you; ask him for complete information or write direct to Ranco Inc.

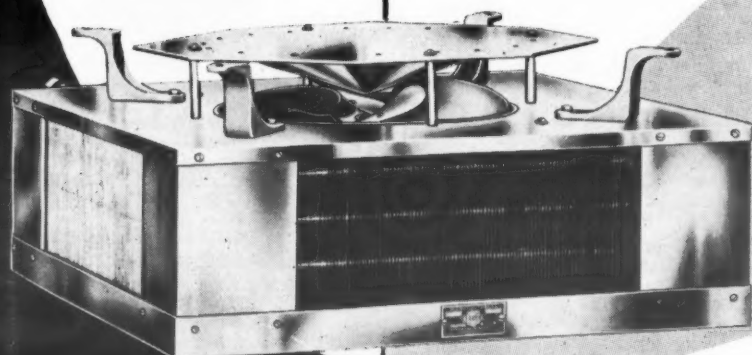
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Like all other coils in the complete "Record" line, the Supreme "Circle-Air" coil has been engineered to do a special job. It is the perfect coil for fresh meat and flowers or any application where high humidity and low air velocity are essential for perfect results. This coil discharges a complete circle of air into all four corners of the cooler. Write today for complete engineering specifications.

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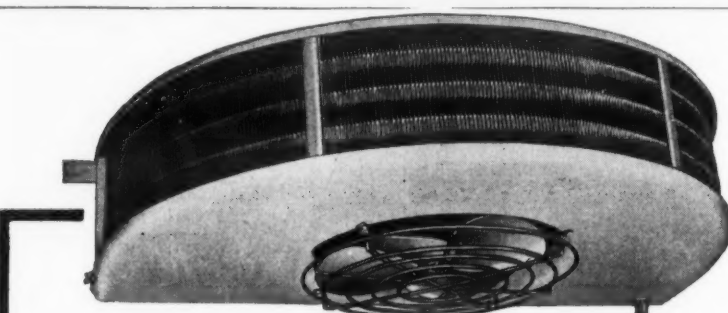
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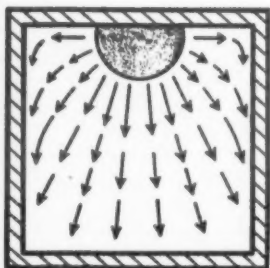
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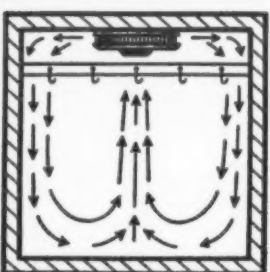
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RATES for all other classifications \$5.00 per insertion. Limit 50 words.

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POSITIONS WANTED

SERVICE ENGINEER capable of running a service shop or a crew of men in the field. Have serviced and installed all types of commercial equipment as well as "Freon" and ammonia locker plants, ammonia equipment in slaughter houses and quick freezing plants. AL. CLAUSEN, Rte 1, Box 60, Watsonville, California.

REFRIGERATION SERVICE trainees: Graduates of intensive 8 month course on commercial and domestic refrigeration servicing desire on-the-job training willing to go anywhere in the United States. For further information write William B. Arpe, Placement Manager, MASS. TRADES SCHOOLS, 271 Huntington Ave., Boston 15, Mass.

YOUNG EXECUTIVE wants position as divisional manager or representative for manufacturer or large distributor of domestic, commercial refrigeration, or air conditioning equipment. Ten years experience management, warehousing, advertising, sales, service, and distributor dealer organization. Excellent references. Eastern location preferred. Capital if required. BOX 2419 Air Conditioning & Refrigeration News.

SERVICE MANAGER—capable organizer and supervisor of service and installation 20 years experience in domestic and commercial refrigeration, heating and air conditioning with dealer and distributor organization. Technical education, extensive field experience with a sound general knowledge of engineering. Excellent references. Southern location preferred. BOX 2439 Air Conditioning & Refrigeration News.

SERVICE MANAGER: Refrigeration, appliances, and air conditioning. Many years experience in refrigeration sales, service, and management. Desires position as service manager or service dealer contact field man. BOX 2452, Air Conditioning & Refrigeration News.

POSITIONS AVAILABLE

CARRIER DISTRIBUTOR requires the services of a refrigeration sales engineer, capable of handling commercial and industrial refrigeration, air conditioning and low temperature applications. Not essential, but would prefer a man experienced with Carrier equipment. ALLIED REFRIGERATION SALES CORP., 2540 Prospect Avenue, Cleveland, Ohio.

FIELD MANAGERS—Western Pennsylvania and West Virginia. Openings one or more refrigeration dealer contact men, on most complete lines of store fixtures, freezers, reach-ins, cases. Guaranteed earnings of \$5,000, with anticipated earnings \$7,000 to \$8,000. Act promptly. See MR. BROWN at 212 Fancourt St., Phone Court 6672, Pittsburgh, Pa.

FIRST CLASS mechanic with at least seven years of experience in all types of commercial refrigeration wanted by large corporation at Pensacola, Florida. Reference required. Apply CAPADUCA STORE FIXTURES, P.O. Box 921, 500-506 S. Palafox St., Pensacola, Florida.

SALESMAN AND also one counterman for Chicago refrigeration wholesaler. Must have experience, 40 hours per week—no Saturdays. Apply CHASE REFRIGERATION SUPPLY COMPANY, 546-48 W. 119th Street, Chicago 28, Illinois.

REFRIGERATION ENGINEER, E.E. or M.E. Must have five years experience designing cabinets. Kansas City firm. KANSAS CITY BOND & EMPLOYMENT COMPANY, 801 Columbia Bank Building, Kansas City, Missouri.

WANTED, MANAGER for commercial refrigeration, sales and service department. Knowledge of air conditioning installations desirable. Salary \$100.00 per week plus traveling expenses and share of profits. Long established company with top connections. Advise experience in detail and references in first letter. KUHR BROTHERS, Savannah, Georgia.

REFRIGERATION APPLICATION—Sales Engineer—Position with fast growing refrigeration and air conditioning equipment manufacturer. 5 to 50-H.P. condensing units. Unusual opportunity for man with refrigeration sales experience and training, between ages of 25 and 35. Give full details, salary desired, etc. SALES MANAGER, 1016 E. Columbia, Evansville, Indiana.

WANTED: EXPERIENCED salesmen to represent large manufacturer in commercial refrigeration and air conditioning field, headquartered in Kansas City, Missouri, St. Louis, Missouri, and Dallas, Texas. Salary, expenses, and incentive basis. Give full particulars when answering. BOX 2417 Air Conditioning & Refrigeration News.

SALES MANAGER wanted by wholesaler located in Midwest. Salary \$4,000—\$5,000 per year. Must be thoroughly familiar with commercial refrigeration equipment and parts and air conditioning equipment. Write full details on education and experience, enclosing photo and giving references and name of present employer. BOX 2440 Air Conditioning & Refrigeration News.

GRADUATE MECHANICAL engineer: Company building laboratory equipment for low temperature service requires man familiar with current refrigeration practice, calculation of capacities, design of equipment, and production supervision; Company employs about 200; Location, Middle Atlantic States. Excellent opportunity for advancement. Write, giving all pertinent data, including salary. BOX 2442 Air Conditioning & Refrigeration News.

EXCELLENT OPPORTUNITY for the right man. An air conditioning firm, distributors to dealers in Illinois, Indiana, Ohio and Michigan, has positions for two air conditioning sales engineers. Must be able to figure, bid and sell air conditioning jobs. Salary and commission. Give full particulars in answering. BOX 2443 Air Conditioning & Refrigeration News.

EXCELLENT OPPORTUNITY for sales engineer well versed in application of commercial refrigeration evaporators, experienced in jobber contact work. Texas territory available. Ample salary, expenses, commission arrangement, straight commission setup as desired. Products nationally advertised and sold through refrigeration wholesalers. Fine opportunity with well established manufacturer. BOX 2446 Air Conditioning & Refrigeration News.

WANTED: SALESMEN calling on refrigeration service shops can add substantially to their income by selling washing machine parts for an established parts jobber, commission basis. Our men earn \$150 to \$300 per month extra. We train you supply catalogs and price lists. BOX 2449, Air Conditioning & Refrigeration News.

REFRIGERATION ENGINEER: With practical commercial experience in refrigeration design, coil application, estimating and refrigeration service. Permanent, steady employment, with advancement on basis of individual effort, capacity and attainment; with an established midwest commercial refrigeration manufacturer. State educational background, employment record, age, marital status and starting salary. BOX 2451, Air Conditioning & Refrigeration News.

EQUIPMENT FOR SALE

MOTORS AND condensing units—available at once— $\frac{1}{4}$ to $\frac{1}{2}$ HP. Universal condensing units with or without motors. Special—six hole ice-cream cabinets with $\frac{1}{4}$ hp. Copeland units less motors \$225. Also beverage coolers, beer equipment, stainless steel reach-in freezers. ALBROD CORP., 319 West 48th St., New York City 19, CI 6-9100.

ONE NIAGARA #2520 evaporative Aero condenser—\$928.86. One Niagara #25x150 Duo-Pass Aero condenser—\$841.85. Both units are new in factory crates. ALLIED REFRIGERATION CORP., 1635 E. 55th Street, Cleveland 3, Ohio.

ZERO TEMPERATURE compartments for present reach-in equipment. Amazing new INNER-FREEZE units installed with existing machinery at extremely low cost. Large profit to dealers and servicemen. Don't overlook this space saving, time saving product for dual-temperature jobs. APPLIANCE SERVICE CO., 71 Broome St., Binghamton, N. Y. Write for free literature.

FOR SALE—immediate delivery: York air conditioning units, 3 tons, self contained, air cooled, 110/220 volts, 50/60 cycles, horizontal type, OD-5"x5"x27" high, new, original crating, real bargain at \$900.00 each, inspection invited. C. D. E. REFRIGERATION SERVICE, 1002-60th Street, Brooklyn 19, New York.

IMMEDIATE DELIVERY—new air conditioning equipment. Weathermakers complete with motor, "Freon" coil, etc. 2 ton to 25 ton. SWSI, DWDI, and twin centrifugal blowers, propeller fans, heating and cooling coils, evaporative condensers, self-contained air conditioning units, condensing units. CONTROLTEMP CORP., 236 Butler St., Brooklyn 17, N. Y.

15 TON FRICK ice machine—5 x 5 ammonia compressor with 15 HP 3-phase 220 V motor and automatic starter; water cooling unit & circulator motors; overhead crane, 300 lb. ice cans, 8-blower type room coils, solenoid valves, etc. A. G. CRUNKLETON ELECTRIC COMPANY, INC., Greencastle, Pennsylvania.

FOR SALE—AC motors $\frac{1}{2}$ to 3 hp, single and 3 phase, list price. Immediate delivery. EDISON COOLING CORP., 310 E. 149th St., Bronx 51, N. Y.

QUALITY BOBTAIL fountains; reach-ins, walk-in boxes—wood, metal; dough retarders; double duty cases—stainless steel, porcelain; dairy, florist, bakery cases; ice cream hardening cabinets; thermopane frozen food cases; milk, sandwich coolers; stainless steel back bars; with machines. Equipment made to special order. FRIGITEMP CORP., 931 Bergen St., Brooklyn 16, MA 2-9093.

3-5-7 $\frac{1}{2}$ TON SELF-CONTAINED air conditioning units, 3-5-7 $\frac{1}{2}$ —15 ton "F-12" condensing units, standard makes. Same day shipment, dealer prices. Wire GULF REFRIGERATION SALES & SERVICE, Corpus Christi, Texas. Phone 3-2805.

10 NEW MILLS 60 gallon Hardening cabinets in original crates. Model 60H at dealer cost. Can furnish condensing units if desired. Write HORRELL'S, 1410 Church St., Nashville, Tenn. Phone 5-0803.

WALK-IN COOLERS, sectional. Kiln-dried fir throughout. 4 in. fibre glass, natural finish, \$.95 per sq. ft. Beer coolers, \$.85 per sq. ft. Cooler and freezer doors as low as \$36.50. No extra charge for special sizes. Florist boxes. Wholesale only. MIDWEST MANUFACTURING CO., 101 Glenwood, Minneapolis 2, Minn.

1000 MOTORS, FOR sale, from stock $\frac{1}{4}$ hp.—3425 RPM—3 ph/230 V. (Under-rated—easily equal to $\frac{1}{2}$ hp.) Ballbearing for vertical or horizontal. Enclosed Fr. $\frac{3}{4}$ in. shaft. \$30 each. This rugged motor cannot burn out. (Glass insulated wire coils.) MODERN SUPPLY CO., 206 Fulton St., New York 7—CO 7-0100.

FREEZER PLATES 18" x 72" Peerless \$11.00 each, 12" x 72" Peerless \$8.50 each. 3 HP. Curtis Water Cooled Units, complete \$375.00 each. 1 HP Dicelair Air Cooled Units, complete \$198.00 each. RICHMOND REFRIGERATION SERVICE, INC., 765 Post Avenue, Staten Island 10, New York.

FLOAT REPLACEMENTS. For replacing defective high side floats on all household units. Regular charging connection, capillary tube setup, internal strainer and exact mounting plate. Part #2000-Westhouse (4 hole plate), and #2010 (3 hole plate); Part #2020-Gibson Part #2030-General Electric (DR-1 & DR-2). Part #2040-For general replacement (undrilled plate). \$.75 each. SEALED UNIT PARTS CO., 3097 Third Ave., New York 56.

SEALED CROSLLEY TERMINALS. Installed from the outside in a few minutes without opening the compressor. Corrects leaky terminals on all Crosley "F-12" units. Set of three \$5.25 (Part No. 1020). Installation tool \$.20. Immediate delivery. Money-back guarantee. SEALED UNIT PARTS CO., 3097 Third Ave., New York 56, N. Y.

CONDENSING UNITS complete with motors $\frac{1}{4}$ to $\frac{1}{2}$ HP. Expansion valves, controls, pulleys, belts, dryers, etc. All equipment is new in original cartons. Will be sold at wholesale cost or less. Write for list prices. ULTRA-COLD, INC., 2619 Exposition Place, Los Angeles 16, California.

HOME FREEZERS—12 cu. ft.—Nationally advertised brand, less refrigerating unit—\$165.00. $\frac{1}{4}$ HP. AC refrigerating unit—\$62.50—priced to sell with cabinet. All prices net—FOB Kansas City, Missouri. 10% with order—Balance s/d/b/l. WESTPORT REFRIGERATION COMPANY, 2605 Ban Brunt, Kansas City, Missouri.

PAN-ELECTRIC ice cuberators. \$375.00 FOB Spokane. Never unpacked. Terms: Sight draft B/L attached. P. O. Box 724, Spokane, Washington.

DELCO-ELECTRIC motors, $\frac{1}{4}$ HP, 110 volts, capacitor type, resilient mounted, 1725 RPM, 60 cycle. Thermo protection, new and in original boxes from factory. Approximately 70 on hand. Write P. O. BOX 1034, Lima, Ohio. (A quantity of various sizes, Government surplus, refrigerated warehouses.)

$\frac{1}{2}$ HP UNITS complete with motor. \$98.50. Other models from $\frac{1}{4}$ HP to 1 HP at low prices. All units supplied with motors. Send for catalog 742A. BOX 2405 Air Conditioning & Refrigeration News.

IMMEDIATE DELIVERY: New Gemco or Typhoon 5-ton air-conditioning unit \$11.00 each. 12" x 72" Peerless \$8.50 each. 6-hole ice cream cabinets \$135; Bev-food 14 cu. ft. refrigerator-beverage cooler \$200 less unit; reach-in refrigerators, freezers, display cases. BOX 2433 Air Conditioning & Refrigeration News.

SURPLUS STOCK—display & closed top low temperature cabinets. Standard manufacture—sizes 4.5 to 21 cu. ft. Stainless steel delicatessen & dairy cases. Complete with coils—sizes 6"-8"-10" & 12" lengths. Beverage coolers—with or without units. Prices below cost. Reply BOX 2445 Air Conditioning & Refrigeration News.

WORTHINGTON STORE Coolers: In stock, package air conditioners manufactured by Worthington Pump & Machinery Corporation, complete with discharge plenums, new, never uncrated, 3-ton \$750.00, 5-ton \$950.00 FOB our warehouse. We have only a few of each size; so hurry. BOX 2450 Air Conditioning & Refrigeration News.

FRANCHISES WANTED

MANUFACTURERS REPRESENTATIVE organization selling to dealers and chains only, are seeking quality line of commercial refrigerator equipment for Eastern territory. Primarily interested in refrigerator cases, coolers, fountain equipment, etc. Product must bear thorough quality inspection, for consideration. All correspondence confidential. REFRIGERATED EQUIPMENT SALES, 85 Liberty St., New York, N. Y.

FRANCHISES AVAILABLE

WE HAVE a few dealer franchise locations available for the fastest moving line of water air conditioning. Limited quantities on immediate delivery. Don't miss this opportunity. TEMP-CONTROL, INC., 208-210 E. State St., Peoria 2, Illinois.

A FEW dealerships available. Warren controlled quality commercial refrigerators. Display cases, beverage coolers, walk-in refrigerators, reach-in refrigerators, open-type refrigerated cases, and other commercial items. Write factory. THE WARREN COMPANY, INC., P.O. Box 1436, Atlanta 1, Georgia.

BUSINESS OPPORTUNITIES

REFRIGERATION SERVICE and commercial sales. Concession with large old established Pasadena appliance dealer is offered by present owner. Equipment, trucks, complete refrigeration unit and repair parts, offered for \$15,000.00. Wonderful opportunity for qualified man to step into going profitable business. Address—FRANK FLICK COMPANY, 1706 E. Walnut St., Pasadena, Calif.

FOR SALE: Commercial refrigeration and air conditioning business in Waukegan, Illinois. Good, established business. Reason for selling ill health. WALTER E. HUHNS, 1720 Grand Avenue, Waukegan, Illinois. Ontario 6488.

FOR SALE: Refrigeration, sales and service, commercial only, in Brooklyn, N. Y. About \$700.00 monthly contract service plus outside sales & service. About \$60,000.00 annual business. Well known in vicinity, good reputation, owner retiring. BOX 2441 Air Conditioning & Refrigeration News.

Heat Exchange Institute Issues Standards Book On Steam Jet Systems

NEW YORK CITY—Heat Exchange Institute announces publication of the second edition of its Steam Jet Ejector and Vacuum Cooling Section Standards. These Standards consist of the following three parts, bound in one book:

Part one, Steam Jet Ejectors
Part two, Test Code for Steam Jet Ejectors

Part three, Steam Jet Vacuum Refrigeration Equipment

Part one contains up-to-date recommendations on nomenclature, operating principles, types of assemblies, capacity, and standard accessories and materials of construction.

The Test Code for Steam Jet Ejectors, part two, has been considerably revised and contains revised steam flow curves based on the latest available data; a revised critical pressure ratio curve; recommendations covering measurement of motive steam, condensing water, pressure, and capacity; information on performance tests, revised illustrations of HEI standard flow nozzles; official HEI air orifice capacities; revised diagrammatic arrangements of apparatus for conducting various tests; and air water vapor mixture data.

Part three—Steam Jet Vacuum Refrigeration Equipment—contains recommended definitions, nomenclature, performance, etc.

Price of the revised publication is \$1 per copy, and it may be secured from the office of the secretary, C. C. Rohrbach, 90 West Street, New York 6, N. Y.

Charleston Distributor Opens Columbia Branch

COLUMBIA, S. C.—Cannon Distributing Co. of Charleston, announces the opening of a branch office and warehouse at 917 Huger St. in Columbia.

Hajoca Corp. Sets Up Third Refrigeration Supply Dept.

READING, Pa.—Hajoca Corp. has opened a refrigeration supply department in Reading, Pa., reports H. E. Tippet, manager of the refrigeration division. This is the third refrigeration department opened by this corporation.

This new Reading department to serve the refrigeration service trade was opened Aug. 4. In addition to refrigeration supplies and parts this warehouse also carries a complete line of pipe, valves and fittings for the engineers serving this territory.

C. W. Kinsey, manager of the branch warehouse, said that Jack Landis would handle the outside sales efforts of the branch while Orville Frank would be the inside salesman in the new department.

Young Named Comptroller For Redmond Co., Inc.

OWOSSO, Mich.—W. Walter Young has been named comptroller of Redmond Co., Inc., producer of low-range fractional horsepower electric motors.

Mr. Young comes from Pittsburgh, where he served as resident manager for five of the seven years he spent with Harry B. Culley & Co., accountants and auditors.

Prior to that he acted in the capacity of CPA for S. D. Leidesdorf & Co., auditing firm. Then he became vice president and treasurer of RCA Victor Distributing Corp. of Chicago.

Barnett's Refrigeration Co. Incorporated In Jonesboro

LITTLE ROCK, Ark.—Barnett's Refrigeration Co., Inc., at Jonesboro, has received a charter from the Secretary of State, listing paid-in capital stock of \$5,000. The incorporators are: Fred C. Barnett, resident agent; Aleene Barnett, and Margaret Randle, all of Jonesboro.

Iceberg Lockers Names Five New Distributors

NEW YORK CITY—Appointment of five new distributors for Iceberg Refrigerated Locker Systems, Inc. has been announced by F. C. Margolf, company sales manager.

The new distributors are the MacLennan Co. of Sacramento, Calif., Gilmore Refrigeration Service of Pensacola, Fla., the Ramsey-Bennett Co. of Cleveland, Ohio, Bell-Clark & Co. of Allentown, Pa., and Abington Tractor & Implement Co. of Clarks Summit, Pa.

Century Reports Net Income Of \$1,260,787 for Half Year

ST. LOUIS—Net income for the six months ending June 30, 1947 exceeded the net income for the entire year 1946 by more than \$60,000, the Century Electric Co. here reported to stockholders.

Comparative figures are \$1,260,787 for the first half of this year and \$1,198,453 for all of 1946, the company's report showed.

Net sales for the first six months of 1947 amounted to \$10,795,747, it said. For 1946, net sales were \$14,020,320.

Cutler Opens Branch, Enlarges Cleveland Office

MILWAUKEE — Opening of a branch sales office in Saginaw, Mich., and occupation of a new and larger office in Cleveland has been announced by Cutler-Hammer, Inc. here.

R. L. Hibbard will manage the Saginaw office located at 107 N. Franklin St., as a branch of the Detroit district sales office, the company said.

The new Cleveland office is located at 2010 E. 46th St. and is headed by R. J. Eckstein, sales manager for the Cleveland district.

Duggan Reveals Deepfreeze Sales Training Program At Sales Managers' Meet

NORTH CHICAGO — Deepfreeze's plan for multiplying the effectiveness of the sales story through thorough sales training at each level—particularly at the dealer level—was outlined by General Sales Manager F. F. Duggan at a recent four-day meeting held for regional and district managers.

The managers were advised to make full use of "The Deepfreeze Digest of Home Freezing." This four-volume sales training series covers history, market, and use values; product; selling techniques; and questions and answers.

"The series provides a good working knowledge of what the product will do for the user, how it is built and why, and the preparation of selling aids to illustrate the points," Mr. Duggan explained to the district managers.

"Other components of the Deepfreeze plan include instruction in training dealer groups, how to demonstrate Deepfreeze home freezers, resale work, wider use of sales promotion materials, obtaining live floor and window displays, putting the cooperative advertising plan to work, gaining public utility activity, and extending dealer coverage," Mr. Duggan said.

Other sessions of the meeting covered hiring retail salesmen, selling the need for home freezers, and selling the product. Deepfreeze versus the competition was the feature of one session.

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Box 2447, Air Conditioning & Refrigeration News

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Complete Line to include 1/4 to 5 h. p.

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COMMERCIAL REFRIGERATION

Lehigh Mfg. Co.
PLANT: LANCASTER, PA.

Joins Betz Corp.



V. C. KNIGHT
(See story on page 1)

R.B. Rogers Cos. Merges--

(Concluded from Page 1, Column 2)

proved by stockholders of the R. B. Rogers Companies and will become effective immediately, Rogers stated. The Rogers Companies, which make air conditioning equipment and conduct other manufacturing, export, and sales operations, owned 33% of Indian stock.

"The action of the Indian stockholders today marks the final step in a reorganization plan which will enable the company to acquire modern machinery, tools, and plant to launch upon an expanded motorcycle manufacturing program," Rogers added. "The merger improved Indian's financial position substantially."

"Loans with two banks were arranged for \$1,500,000 on a term basis and following this the consolidated net current assets of Indian, on a pro forma basis reflecting March 31, 1947 conditions, will increase to over \$4,600,000 as compared with approximately \$1,600,000 prior to the merger. This \$1,600,000 included \$700,000 provided by the Atlas Corp. for the purchase of common shares as a part of the plan of the reorganization."

Upon completion of the plan the capitalization of Indian will consist of 225,000 shares of preferred, and 1,250,000 shares of common, both types without par value.

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N.Y. City Officials Crack Down on Inadequate Refrigeration and Sanitation In Delicatessens

NEW YORK CITY—After warning New York food merchants of the dangers presented by improperly prepared and unrefrigerated salads, ham, and smoked fish, City Health Commissioner Israel Weinstein reported that a check-up on 60 delicatessens disclosed "unsatisfactory conditions" in 48 of them.

Forty of the shops were warned that summons would be issued unless violations of the city's sanitary code were not remedied within a few days.

In speaking before the New York State Food Merchants convention recently, Dr. Weinstein stated that his office intended to crack down on delicatessens to enforce regulations covering "refrigeration, ex-

posure to dirt and dust, unclean handling of food, and evidence of vermin.

"The inspectors will direct their attention to food processing or handling in a potentially hazardous manner," he informed the merchants.

"The most easily contaminated foods are salads, hams, and smoked fish. These can become contaminated if they are not properly prepared or kept under refrigeration and can cause intestinal disorders," he said.

New York has 5,000 delicatessens and only those serving food on the premises are licensed. However, Dr. Weinstein indicated that he would seek to have the others covered by licenses.

Florida Growers Open 'Frozen Food Center'

WEST PALM BEACH, Fla.—The "Frozen Foods Center," huge co-operative quick-freezing and storage plant built by an association of Florida growers, was completed here recently.

Outstanding features of the Frozen Foods Center are a giant holding room which will accommodate 10 carloads of frozen foods, complete locker service for upwards of 1,800 customers, a meat, vegetable, and fruit processing plant, and a packaging room which is equipped for the automatic packaging of seasonal items.

The building has a white stucco front, with parking space in front for 60 automobiles.

Keller, Stikeleather Get McQuay Posts

MINNEAPOLIS — McQuay, Inc. here, manufacturer of air conditioning equipment, has assigned two new territories to R. E. Keller, who has been contacting wholesalers for McQuay since 1945, and to Ted Stikeleather, who joined the company on Aug. 1, a company announcement said.

Mr. Keller will cover most of Michigan, the counties of Lagrange, Noble, Steuben, and Dekalb in northern Indiana, and the counties of Williams, Fulton, and Lucas in northern Ohio.

Mr. Stikeleather will work in western New York, western Pennsylvania, West Virginia, Kentucky, the southern half of Ohio, and most of Indiana.



Congratulations are in order as Weber adds the new Frozel Low Temperature Self-Service Display Case to its famous profit-making family.

Pioneer in frozen food equipment and Super-Market development, Weber has again combined utility and eye-appeal to produce another profit-maker.

THE NEWEST ARRIVAL IN THE WEBER FAMILY

Here's the last word in impulse sales creating equipment... the result of more than fifty years' experience in the food merchandising field.



Here are more sales... more repeat customers... more net profits for retailers of Frozen Foods, Ice Cream and all products which require zero protection.

Now, more than ever, retail merchants all over the world agree that the planned installation of Weber Equipment is a profitable investment!

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